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Discussion Paper DP/2014/1

# Accounting for Dynamic Risk Management: a Portfolio Revaluation Approach to Macro Hedging

Comments to be received by 17 October 2014

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**Accounting for Dynamic Risk  
Management: a Portfolio Revaluation  
Approach to Macro Hedging**

*Comments to be received by 17 October 2014*

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## Introduction

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- IN1 Risk management is a common activity that is applied by many if not most entities. In some circumstances, these activities are highly formalised and may be subject to regulatory oversight. In other circumstances, these activities may be informal or ad hoc. Risk management is complex and developing an accounting approach to reflect the underlying economics of such activities that is operationally feasible and that provides information that is useful to users of financial statements has been challenging. The International Accounting Standards Board (IASB) originally sought to better reflect risk management in the accounting by amending IAS 39 *Financial Instrument: Recognition and Measurement* to incorporate fair value hedge accounting for a portfolio hedge of interest rate risk. However, the scope of that amendment was limited to interest rate risk and banks have found those particular hedge accounting requirements difficult to apply in practice. This is because banks' risk management of interest rate risk is usually performed dynamically, and is based on open portfolios to accommodate the constant changes in risk exposures faced by the bank.
- IN2 This Discussion Paper (DP) outlines a possible approach to accounting for an entity's dynamic risk management activities. The approach is the portfolio revaluation approach (PRA), which aims to better reflect dynamic risk management in an entity's financial statements.
- IN3 The PRA applies to risks that are managed in portfolios that change over time and for which the associated risk management process is dynamic. Under the PRA, an entity would adjust the exposures that are being dynamically risk managed to reflect the effect of changes in value that are arising from the risk that is being managed. For the managed exposures, only the managed risk is revalued—the managed exposures are not measured at fair value.
- IN4 For example, a bank has a portfolio of assets and liabilities on which interest rate risk is being managed dynamically. Those assets and liabilities would be revalued for the effects of changes in interest rates if the PRA were applied. This change in value would be recognised in profit or loss. Any derivatives used to mitigate the interest rate risk would be measured at fair value through profit or loss (FVTPL). Hence, the net effect of managing the interest rate risk would be reflected in profit or loss.
- IN5 Dynamic risk management of interest rate risk, particularly as managed by banks, is used throughout this DP for illustrative purposes. However, the approach considered in this DP is intended to be applicable to the management of risks arising from both financial and non-financial items, when those risks are dynamically managed. The IASB is using this DP as a basis for learning more about how the approach could be applied to other risks, and what, if any, special considerations are necessary for risks other than interest rate risk.
- IN6 An approach which aligns the accounting with dynamic risk management would potentially improve the information that is provided to users of financial statements about the risks to which an entity is exposed and how they are managed. However, while the approach is simple in concept, it would represent a significant change in accounting. For example, entities dynamically manage

risks on the basis of behaviouralised rather than contractual cash flows, and the cash flows considered can include those in periods beyond contractual maturities. If this dynamic risk management perspective is reflected in the financial statements through the application of the PRA, the behaviouralisation assumptions would affect profit or loss. Also, determining how broadly the PRA should be applied within an entity and whether it should be optional or mandatory has consequences for both the operationality and the information that would be provided in the financial statements.

- IN7 In order to determine the next steps in the accounting for dynamic risk management the IASB has issued this DP. This will enable the IASB to obtain more information to understand the costs and benefits of the PRA including whether, and the extent to which, the risk management perspective can and should be reflected in the financial statements. The IASB is particularly interested in whether the information provided by the PRA would be useful to users of financial statements, whether the PRA faithfully represents the dynamic risk management perspective in the view of preparers and to understand the operational effects of the PRA. The feedback from this DP will help the IASB determine the next steps in the accounting for dynamic risk management.

## Summary and invitation to comment

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### History of the project

- IN8 The IASB began its deliberations on the Accounting for Macro Hedging project in September 2010. The drivers for initiating the project were the difficulties associated with applying existing hedge accounting requirements to a dynamically managed portfolio with continuous or frequent changes in the risk positions that are being hedged.<sup>1</sup> In effect, open portfolios are forced into closed portfolios for hedge accounting purposes. These constraints make it difficult to reflect dynamic risk management in financial statements. In addition, the existing portfolio hedge accounting requirements in IAS 39 *Financial Instruments: Recognition and Measurement* are limited to interest rate risk only. For these reasons, the IASB decided to consider a new accounting model for dynamic risk management.
- IN9 The DP assesses whether an accounting approach that reflects how entities manage risk dynamically is necessary to help users of financial statements to understand risk management activities. Specifically, this DP considers whether the PRA would provide useful information, and whether the operational issues of existing hedge accounting requirements are addressed. In the PRA, for accounting purposes, the net open risk position(s) of dynamically managed portfolio(s) is identified and revalued for changes in the managed risk (for example, interest rate risk) with any gains or losses recognised in profit or loss. The advantages of this approach are:

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<sup>1</sup> The term 'hedge accounting requirements' in this DP refers to the hedge accounting requirements in accordance with IAS 39 *Financial Instruments: Recognition and Measurement* and IFRS 9 *Financial Instruments*.

- (a) the presentation of the revalued net open risk position(s) and associated gains or losses, combined with explanatory disclosures enhance transparency regarding the actual business risks and risk management activities;
- (b) a more faithful representation of economic volatility in profit or loss; and
- (c) data and systems already used for risk management purposes are more likely to produce relevant information for accounting purposes.

### **Why is the IASB issuing this DP?**

IN10 In May 2012 the IASB tentatively decided to develop a DP as the initial due process step. The IASB noted that the development of an accounting model for dynamic risk management was not a modification to hedge accounting requirements but that it would instead be a fundamental change in how risk management is considered for the purposes of financial reporting. Given the complexities involved, the DP allows the IASB to seek feedback on a broader range of alternatives and variations.

IN11 The IASB also realised that the development of a new accounting model for dynamic risk management would take time. This conflicted with the timeline for IFRS 9 *Financial Instruments*. Consequently, in May 2012 the IASB separated the two projects, allowing it to finalise IFRS 9 while progressing with the accounting for dynamic risk management as a separate project.

### **Who is this DP relevant for?**

IN12 The preliminary views in this DP are potentially relevant to all entities that manage risks in open portfolios on a dynamic basis. The PRA presented in this DP is not intended to be limited to banks or interest rate risk. Ultimately, if the preliminary views in this DP became a final Standard, a key element in determining how entities would be affected would be the decision on whether the model is mandatory or optional.

IN13 In addition, the outcome of this project would replace the current 'fair value hedge accounting for a portfolio hedge of interest rate risk' in IAS 39.<sup>2</sup> Consequently, entities using those accounting requirements would be impacted if the preliminary views in this DP become a final Standard.

### **What is the objective of the DP?**

IN14 The objective is to seek views from interested parties so that the IASB can evaluate whether, and how, the new model would result in an enhancement of the usefulness of the information provided by the financial statements and also assess whether the model being explored is operational.

IN15 In developing the DP the IASB focused on the areas that were considered to be troublesome and onerous in practice with regard to the existing fair value hedge

<sup>2</sup> The 'fair value hedge accounting for a portfolio hedge of interest rate risk' is included in paragraphs AG114–132 of IAS 39.



accounting for a portfolio hedge of interest rate risk in IAS 39. Consequently, the DP does not cover all the issues that the IASB would expect to cover in an ED.

IN16 In some areas this DP includes more discussion than the IASB would include in an ED or final Standard. The IASB has included this additional analysis in the DP to provide context for those responding to the DP.

IN17 The IASB has not reached preliminary views on all of the issues discussed in this DP. Furthermore, the IASB may change its preliminary views because of comments received on this DP.

### **What are the next steps in this project?**

IN18 The approach considered in this DP is preliminary and subject to change. The IASB will consider the comments received on this DP to determine the appropriate next steps.

### **Invitation to comment**

IN19 The IASB invites comments on all matters in this DP and, in particular, on the questions set out in each section. There is also a copy of all the questions in Appendix A6.

IN20 Comments are most helpful if they:

- (a) respond to the questions as stated;
- (b) indicate the specific paragraph or paragraphs to which the comments relate;
- (c) contain a clear rationale; and
- (d) describe any alternatives that the IASB should consider, if applicable.

IN21 Respondents need not comment on all the questions and are encouraged to comment on any additional matters.

IN22 The IASB will consider all comments received in writing by **17 October 2014**. The IASB will make its assessment based on the merits of the information provided and not on the number of responses to each question.

### **How to comment**

IN23 Comments should be submitted using one of the following methods.

**Electronically** Visit the 'Comment on a proposal page', which can be  
(our preferred method) found at: [go.ifrs.org/comment](http://go.ifrs.org/comment)

**Email** Email comments can be sent to: [commentletters@ifrs.org](mailto:commentletters@ifrs.org)

**Postal** IFRS Foundation  
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London EC4M 6XH  
United Kingdom

IN24 All comments will be on the public record and posted on our website unless confidentiality is requested. Such requests will not normally be granted unless

supported by good reason, for example, commercial confidence. Please see our website for details on this and how we use your personal data.

## Section 1 Background and introduction to the portfolio revaluation approach (PRA)

### Background

- 1.1 For most entities, risk management, of which dynamic risk management is a subset, is a multi-dimensional activity that involves risk identification, analysis and mitigation. Each of these elements involves complex processes, judgements and consideration of market views. Many entities manage risks, such as interest rate risk, on a portfolio basis rather than on an individual contract basis. Dynamic risk management is a continuous process because the risks that entities face evolve over time. Consequently, one of the key features of dynamic risk management is the continuous reassessment of the *net open risk position(s)* arising from the *managed portfolio(s)*. Dynamic risk management is undertaken by a wide range of entities, from financial institutions to mining, utility and manufacturing entities. Likewise, the types of risks that can be dynamically managed are varied and include interest rate risk, commodity price risk and foreign exchange (FX) risk.
- 1.2 Financial institutions often manage interest rate risk dynamically based on *open portfolios*. For example, few loan portfolios are static, because portfolios usually change over time as new loans are added and existing loans are prepaid or mature. Consistent with this, risk management is dynamic, with frequent (for example, daily) monitoring of the net open interest rate risk positions and a corresponding reassessment of risk management activities.
- 1.3 Under the current hedge accounting requirements it is often difficult to accommodate these scenarios, because the current requirements usually require a one-to-one designation between the hedged item and the hedging instrument. In effect, open portfolio scenarios are often forced into closed portfolio scenarios for hedge accounting purposes, when possible. In addition, there are restrictions imposed by the current hedge accounting requirements regarding what can be considered as eligible hedged items. These constraints increase complexity and make it difficult to faithfully reflect dynamic risk management in the financial statements.
- 1.4 In view of these considerations, the International Accounting Standards Board (IASB) is considering a new approach that specifically addresses aspects of dynamic risk management in order to achieve a faithful representation of such activities in the financial statements and a reduction in operational complexity.
- 1.5 Various approaches can be considered to reflect dynamic risk management faithfully in the financial statements. One possible approach is a model that captures all the elements of dynamic risk management, ie risk identification, analysis and mitigation through hedging. Under this approach, if an entity engages in any of these activities, the objective of the model would be to faithfully represent such activities in the financial statements. Such an approach would therefore aim to represent the effect of all risk positions that an entity has at a point in time in its financial statements (ie not only net open risk

positions that it has identified, analysed and decided to hedge but also net open risk positions that it has identified, analysed and decided not to hedge).

- 1.6 An alternative approach is to consider a model that captures dynamic risk management only when all three elements of dynamic risk management are undertaken by an entity, ie risk identification, analysis and mitigation through hedging. Consequently, under this approach, the model would only apply to those circumstances in which an entity has undertaken risk mitigation through hedging. This Discussion Paper (DP) explores both approaches and asks constituents for their views on those approaches (see Section 5).

### **Limitations of the current accounting requirements**

- 1.7 Current IFRS accounting requirements can result in the measurement and/or recognition of exposures in a manner that differs from a risk management view. For example:
- (a) exposure to interest rate risk arises from loans, deposits and interest rate derivatives, however, under current requirements, many loans and deposits are accounted for at amortised cost while interest rate derivatives are required to be accounted for at fair value through profit or loss (FVTPL). Similarly, commodity inventory is often accounted for at the lower of cost and net realisable value, while commodity derivative contracts are accounted for at FVTPL. Consequently, risk management using derivatives may result in volatility in profit or loss even if the purpose of risk management is to reduce the risk faced by the entity.
  - (b) loan commitments (at a fixed interest rate) or firm commitments to buy or sell commodities (at a fixed price) are not usually recognised for accounting purposes at the time that an entity enters into a contract. From a risk management perspective, however, such contracts expose entities to interest rate risk and price risk respectively and risk managers would include those risks when determining their net open risk positions for dynamic risk management purposes. In contrast, the derivatives transacted to mitigate those risks are recognised immediately for accounting purposes and are measured at FVTPL leading to profit or loss volatility even if those transactions actually reduce those risks.
- 1.8 The current hedge accounting requirements allow entities to address such recognition and measurement mismatches by either changing the measurement of the items that give rise to the risk exposure (a fair value hedge) or deferring gains or losses on the hedging instrument to a later period (a cash flow hedge). These requirements, however, are designed primarily for the hedging of static exposures. This is because in order to apply hedge accounting it is necessary to identify specific hedged item(s) and hedging instrument(s) and link them via designation in individual hedging relationships. This represents a challenge in a dynamic risk management environment.
- 1.9 IFRS includes specific requirements for those entities that manage interest rate risk from financial assets or financial liabilities on a portfolio basis. In particular, the requirements in IAS 39 *Financial Instruments: Recognition and Measurement* for fair value hedge accounting for a portfolio hedge of interest rate

risk aim to facilitate hedge accounting at a portfolio level. This allows some hedged items to be included on a behaviouralised basis (for example, prepayable fixed interest rate mortgages) rather than on a contractual cash flow basis and thus accommodates some aspects of dynamic risk management. However, those requirements have some shortcomings. Notably, they are limited to interest rate risk and are tailored to a situation that, in effect, means that they have primarily been used by banks. However, many banks have found these particular hedge accounting requirements difficult to apply in practice and believe that they do not provide useful information about their risk management activities in their financial statements.

### Open portfolios

- 1.10 The portfolio hedge accounting requirements for interest rate risk within IAS 39 do not capture the ‘dynamic’ nature of risk management; because they assume that hedging relationships will be identified on a ‘static’ basis. This assumption is appropriate when portfolios are closed, ie when new exposures are not added and exposures included in the hedged portfolio cannot be removed or replaced.
- 1.11 In reality, portfolios are usually ‘open’. Exposures included within these portfolios change frequently because new exposures are added and existing exposures are removed. Risk managers consider the latest net open risk position, including all new and revised exposures without distinction, and determine the action required to manage that net open risk position.
- 1.12 It is difficult to reflect dynamic risk management within the current hedge accounting framework because of the requirement to link specific hedging instruments with specific hedged items. In practice, current hedge accounting requirements treat an open portfolio as a series of closed portfolios with a short life (ie by periodic discontinuation of the hedge accounting relationship for the previous closed portfolio and by designation of a new hedge accounting relationship for the revised closed portfolio). This gives rise to operational complexities because hedge accounting relationships need to be tracked and hedge adjustments need to be amortised. In addition, the requirement is often onerous to apply given the frequency with which hedged portfolios are updated. The hedge accounting requirements are viewed as artificial because they are not consistent with the risk management processes, which do not distinguish between ‘old’ and ‘new’ exposures. Consequently, the accounting results do not usually provide users of financial statements with information that is consistent with risk management. This limits the relevance of the resulting information.
- 1.13 In addition, it is common for exposures to particular types of risk to be managed on a net basis. For instance, banks usually make risk management decisions based on the net interest rate risk arising from a combination of financial assets and financial liabilities and they often use a *sensitivity analysis* with a maturity

(duration) time band approach.<sup>3</sup> Although the fair value hedge accounting for a portfolio hedge of interest rate risk requirements in IAS 39 reflects that interest rate risk is often managed on a net basis, portfolio hedges are required to be designated on a gross basis for hedge accounting purposes. Consequently, entities have to identify eligible assets or liabilities and designate them as hedged items on a gross basis to obtain hedge accounting. This can result in risk management being misrepresented, as hedged items have to be selected to achieve accounting outcomes rather than to fully reflect hedging activity.

### Demand deposits

- 1.14 IFRS 13 *Fair Value Measurement* states that the fair value measurement of a financial liability that has a demand feature cannot be less than the present value of the amount that is payable on demand.<sup>4</sup> Consequently, for accounting purposes, liabilities that are callable on demand are measured at the nominal or demand amount and are assumed to have no fair value risk with regard to interest rate changes, because they can be withdrawn immediately.
- 1.15 In a banking environment, it is common for customers to maintain demand deposit accounts for an extended period of time. Because of this customer behaviour, risk managers often identify a part of the demand deposit portfolio that is considered to be stable and treat that portion as a fixed interest rate liability (reflecting its ‘sticky’ economic nature) for risk management purposes. These are generally referred to as *core demand deposits*. Risk managers manage the deemed interest rate risk of core demand deposits based on the expected behaviour of depositors. However, in order for items to be eligible hedged items in a fair value hedge, the fair value of the hedged items must vary with the hedged risk. Because the fair value of demand deposits is deemed to be constant for accounting purposes, fair value hedge accounting is precluded.
- 1.16 Since the current hedge accounting requirements prevent a significant component of the managed risk exposures (core demand deposits) of banks from being designated in a hedging relationship, accounting for the derivatives that are used to hedge such exposures at FVTPL results in volatility in profit or loss.
- 1.17 In order to address this volatility in profit or loss (which is inconsistent with the economics driving risk management), it is common for banks to identify alternative items that can be designated as hedged items—for example, suitable variable interest rate assets for which cash flow hedge accounting can be applied. This inability to achieve hedge accounting for core demand deposits directly reduces the faithful representation of risk management in entities’ financial statements.

<sup>3</sup> A sensitivity analysis with a maturity (duration) time band approach is usually called a grid point sensitivity (GPS) analysis and is one way in which a bank might manage interest risk, although a number of other valid techniques exist. For example, some banks may use a simpler technique referred to as a ‘gap analysis’. With this technique, entities distribute interest-sensitive assets, liabilities and derivative transactions into ‘time bands’ according to maturity (if fixed interest rate) or time remaining to next repricing (if variable interest rate). These schedules can be used to generate indicators of the interest rate risk.

<sup>4</sup> That requirement in IFRS 13 was relocated unchanged from IFRS 9 and IAS 39 as a consequence of the IASB’s Fair Value Measurement project.

### Deemed exposures

- 1.18 In order for entities to have a complete view of their exposure to a specific risk, they normally include all exposures in their risk management process, irrespective of the accounting recognition and measurement requirements. This means that there may be exposures included for dynamic risk management purposes that do not satisfy the accounting definitions of assets or liabilities.
- 1.19 An example is *pipeline transactions* in banks. In some circumstances, banks may consider that they are exposed to interest rate risk from fixed interest rate exposures that have not yet been contracted (for example, the interest rate risk arising from advertised offers of lending at fixed interest rates). A bank may include its expected exposure to interest rate risk arising from such transactions in its interest rate risk position and thus it would monitor and manage it in the same way as the interest rate risk on other fixed interest rate exposures. However, before a transaction (ie an exposure) has been contracted, it would not typically be recognised for accounting purposes and would not normally be considered to expose an entity to changes in its value arising from particular risks. Consequently, it is not possible to designate pipeline transactions in hedge accounting relationships.

### Consequences

- 1.20 The limitations of the current hedge accounting requirements have led to many entities, especially banks, finding it difficult to faithfully present the outcome of their dynamic risk management activities in their financial statements. As a result, some have stopped applying hedge accounting altogether, while others apply hedge accounting selectively, or use proxy hedging techniques rather than applying accounting that fully reflects their dynamic risk management processes.
- 1.21 A number of entities use a combination of accounting alternatives (for example, cash flow hedge accounting, fair value hedge accounting and the fair value option) with the aim of minimising profit or loss volatility that would otherwise arise from recognising the changes in the fair value of hedging derivatives in profit or loss. Consequently, despite the fact that dynamic risk management activities are usually implemented in a comprehensive manner, current accounting requirements result in a 'patchwork' presentation that may not portray the effect of risk management in entities' financial statements. Also, hedge accounting may be applied but in a way that involves significant operational effort, focusing on reducing profit or loss volatility in a manner that may not fully portray the economics of dynamic risk management. As a result, non-generally accepted accounting principles (GAAP) information becomes in some cases the source of relevant information to users of financial statements that seek to understand how successful an entity has been at achieving its risk management objectives.

### Approaches considered

- 1.22 The IASB considered whether assets and liabilities that are dynamically managed should be treated as another business model for the purposes of classification and measurement in IFRS 9 *Financial Instruments*. However, given that IFRS 9 is

applicable to all entities, the IASB believed that it was more appropriate to consider an approach that is specifically targeted towards the assets and liabilities that are managed dynamically for risk management purposes rather than making pervasive changes to the entire classification and measurement framework for financial instruments.

- 1.23 In addition, dynamic risk management activity is not only undertaken by banks for interest rate risk. Entities in other industries also manage other risks on a dynamic basis; hence, an accounting approach may also be necessary for such dynamic risk management. Consequently, amending the classification and measurement requirements in IFRS 9 to reflect dynamic risk management activities would not be sufficient.
- 1.24 The IASB considered providing an exception that permitted accrual accounting<sup>5</sup> for derivatives that are used for dynamic risk management. Such an exception would however portray ‘perfect risk management’, even if it was not achieved, as any mismatches between the changes in the fair value of those derivatives and the effect of the risk being managed would not be reflected in the financial statements. Consequently, the IASB’s preliminary views are that accrual accounting for derivatives transacted for dynamic risk management purposes would not provide a more faithful representation of such activities in the financial statements. For instance, in the context of interest rate risk management in banks, information on the success or failure of dynamic risk management activities undertaken to stabilise future net interest income would not be visible to users of financial statements.
- 1.25 The IASB also considered requiring entities to measure all dynamically risk managed exposures at FVTPL (ie reflecting full fair value rather than only revaluing the exposures for the risk being managed). This would achieve the objective of reducing the perceived inconsistency in the mixed measurement approach and would arguably reflect the economics of such risk management in the financial statements.
- 1.26 However, in many cases, a full fair value approach does not reflect an entity’s underlying management for the risks that are not identified for dynamic risk management purposes. The purpose of dynamic risk management activities is not usually to hedge the risk of changes in the full fair value of managed exposures. Rather, entities usually seek to manage a particular risk. For example, in the case of banks, for financial assets and financial liabilities that are held for the purpose of collecting contractual cash flows, typical risk management is to enter into derivatives to manage only the interest rate risk (one possible objective being to stabilise an entity’s net interest income). The other risks within such portfolios, including liquidity and credit risk, will normally be managed separately. Consequently, if full fair value measurement of all exposures within a managed portfolio was required, any changes in the liquidity or credit risk of those exposures could in fact obscure the impact of the interest rate risk management and would result in core information on the entity’s business being masked. The IASB also noted that the majority of

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5 In this context accrual accounting could be construed as either amortised cost accounting or the complete deferral of all fair value changes on the derivative instruments.



respondents to the Exposure Draft *Financial Instruments: Classification and Measurement* published in July 2009 supported a mixed measurement model rather than a full fair value measurement model.

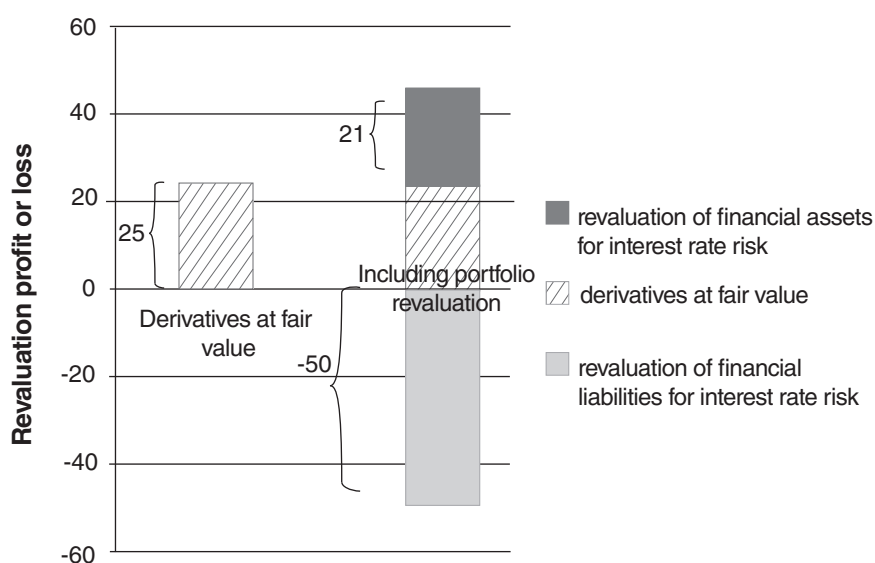
- 1.27 The IASB's preliminary views are that both of these approaches to achieve a single measurement for all exposures included within dynamic risk management (financial assets, financial liabilities and derivatives) have significant shortcomings. Neither accrual accounting nor fair value accounting represent actual risk management faithfully in the financial statements.
- 1.28 Through these discussions a 'PRA (by risk)' emerged, in which, for accounting purposes, an entity's risk position is identified and revalued for changes in the *managed risk*, which in combination with the fair value measurement of the related *risk management instruments* results in the recognition of the resulting net gain or loss from risk management activities in profit or loss. The IASB has developed this accounting approach for dynamic risk management taking into consideration the extent to which accounting standards can, and should, reflect risk management.

## PRA

- 1.29 The purpose of the PRA is to provide a faithful representation of an entity's dynamic risk management activities in its financial statements by enabling users of financial statements to understand the performance of the entity by profit source and corresponding risk.
- 1.30 The PRA would revalue the managed net open risk position(s) only for the changes in the risk(s) that are being dynamically managed. Recognition of income and expense on the other types of risks of the managed exposures would be based on the applicable Standards.
- 1.31 For example, consider a bank that has mismatched portfolios of loans and liabilities and hedges the resulting net open interest rate risk position using interest rate swaps (IRSs). The PRA would result in the portfolios of loans and deposits being revalued for changes in the managed interest rate risk. In accordance with IFRS 9 and IAS 39, the derivatives used for hedging the interest rate risk would be accounted for at FVTPL, assuming that they are not designated as hedging instruments in a cash flow hedge accounting relationship.
- 1.32 Continuing with the example in paragraph 1.31, assume that the interest rate risk on the loans is revalued resulting in a gain of CU21, the interest rate risk on the liabilities is revalued resulting in a loss of CU50 and the derivative position is remeasured, resulting in a gain of CU25. A loss of CU4 (= CU25 + CU21 – CU50) is recognised in profit or loss.<sup>6,7</sup>

<sup>6</sup> In this DP, monetary amounts are denominated as 'currency units' (CU).

<sup>7</sup> This loss of CU4 may arise from movements in the unhedged net open risk positions, the ineffectiveness of the hedging strategy or a combination of both under one of the scope alternatives explored in this DP (see Section 5).



- 1.33 The PRA is not a full fair value model because the managed exposures are only revalued for the risk that is being managed; the managed exposures are not being remeasured at fair value. This means that if, for example, loans are being risk managed with respect to changes in the benchmark interest rate (for example, London Inter-Bank Offered Rate (LIBOR) yield curve) as part of an entity's open portfolio, they would only be revalued for the effect of changes in the benchmark interest rate. Any other aspects of those loans, such as a customer margin (for example, credit margin or deposit margin), would be recognised as interest income/expense on an accrual basis. When the aim of an entity is to stabilise its net interest income, under one of the scope alternatives explored in this DP (see paragraphs 5.2.1–5.2.8), users of financial statements would be given information about whether profits are being earned from the customer margin or whether gains or losses arise from leaving a net open risk position unhedged with respect to the benchmark interest rate risk.
- 1.34 The PRA discussed in this DP also addresses the difficulties identified with the current hedge accounting requirements under IFRS for open portfolios. It accommodates the dynamic nature of risk management in part by not requiring specific hedge designations (under one of the scope alternatives explored in this DP—see paragraphs 5.2.1–5.2.8). This DP also evaluates the implications of including all exposures for the purposes of financial reporting that are considered by risk managers (for example, revaluation of core demand deposits and pipeline transactions).
- 1.35 In addition, this DP explores presentation and disclosure alternatives to consider whether they faithfully represent the dynamic risk management activities of an entity that manages interest rate risk dynamically. Operational feasibility has also been one of the considerations when evaluating the various approaches considered in this DP.

### Comparison between current hedge accounting requirements and the PRA

- 1.36 The following example illustrates the application of the PRA and compares it with the current hedge accounting requirements. The same fact pattern applies to all the examples illustrated in the rest of this Section.
- 1.37 Assume that an entity holds the exposures shown in the following tables as at 1 January 20X0 and 1 January 20X1. To simplify the example, it is assumed that the fixed interest rate exposures arise in the same maturity time band.

#### 1 January 20X0

Assets	CU	Liabilities	CU
Fixed interest rate loans	150	Fixed interest rate liabilities	100
Variable interest rate loans	150	Variable interest rate liabilities	200
<b>Net open risk position</b>			
Receive fixed (pay variable)	50		
<b>IRS</b>			
		Pay fixed (receive variable)	50

#### 1 January 20X1

Assets	CU	Liabilities	CU
Fixed interest rate loans	150	Fixed interest rate liabilities	90
New fixed interest rate loans	20		
Variable interest rate loans	130	Variable interest rate liabilities	210
<b>Net open risk position</b>			
Receive fixed (pay variable)	80		
<b>IRS</b>			
<b>Existing IRS</b>		Pay fixed (receive variable)	50
<b>New IRS required</b>		Pay fixed (receive variable)	30

### Application of IFRS 9—Fair value hedge designation

- 1.38 On 1 January 20X0, the IRS may be designated in a fair value hedge of 33.3 per cent of the total CU150 fixed interest rate loan portfolio.

<b>Fair value hedge designation as at 1 January 20X0</b>	
Hedged item	33.3 per cent of the CU150 fixed interest rate loan portfolio
Hedging instruments	CU50 of IRS

- 1.39 On 31 December 20X0, additional fixed interest rate exposures of CU20 are added to the portfolio at prevailing market interest rates and CU10 of fixed interest rate liabilities are prepaid, increasing the net receive fixed position to CU80. The entity hedges fully its net risk positions and consequently enters into a new IRS of CU30.
- 1.40 For accounting purposes, while the existing fair value hedge accounting relationship can remain intact, a new hedge accounting relationship is required for the new IRS of CU30. The entity could consider the following possible designations:
- (a) additional 20 per cent proportion of the CU150 of the original fixed interest rate loans. However, the fixed interest rate of the new IRS (say 4.5 per cent) will not be the same as the market interest rate on the (historic) loans (say 5 per cent) because market rates will have changed in the intervening period. Consequently the designation would either be:
    - (i) historic loans that can be designated consistently with the initial fair value hedge accounting relationship (ie the same 5 per cent coupon component) to avoid the need to revalue the same loans with respect to different components. However, this could introduce an element of ineffectiveness or 'noise' in the hedge accounting relationship;
    - (ii) the component of the historic loans that matches the on-market IRS leg (for example, 4.5 per cent), but this would require the revaluation of loans that are transacted at the same time and that are managed in the same portfolio with respect to different coupon components (33.3 per cent with a 5 per cent coupon component and 20 per cent of the same portfolio with a 4.5 per cent coupon component).
  - (b) to reduce the off-market issues, designate CU20 of the new IRS as hedging 100 per cent of the new CU20 of fixed interest rate loans, because they will be based on the same market rates (ie 4.5 per cent), and then only designate 6.7 per cent ( $= 10 \div 150$ ) of the CU150 of the original fixed interest rate loans as the hedged item for the remaining CU10 of the new IRS. This most closely represents the economics, because it reflects the fact that the new IRS is partially due to new fixed interest rate assets, but also because of unexpected fixed interest rate liability prepayments, which leave existing asset positions without a natural hedge.
- 1.41 The example in paragraph 1.40 represents possible designation alternatives and it should not be considered an exhaustive list of all possibilities under the circumstances. The example illustrates the complexity that is introduced by all

the designations that are required to meet the current hedge accounting requirements. As a result, hedge accounting requires amortisation and/or different accounting treatments/measurement for different portions of the same exposure in open portfolios. In addition, reported ineffectiveness may not always be representative of the economics. This is because the designation is not fully aligned with the risk management thus the measure of effectiveness/ineffectiveness does not reflect the extent to which the economic strategy being implemented has been successful.

#### **Application of IAS 39—Fair value hedge accounting for a portfolio hedge of interest rate risk<sup>8</sup>**

- 1.42 Continuing with the example, when prepayments are not expected and risk management is based on a contractual rather than a behaviouralised basis, the outcome of the portfolio fair value hedge accounting approach in accordance with IAS 39 and the fair value hedge accounting in accordance with IFRS 9 will be similar to the outcome above.

#### **Application of IFRS 9—‘Macro cash flow hedge’ designation<sup>9</sup>**

- 1.43 Continuing with the same example, another possible alternative is to consider possible designations under the macro cash flow hedge accounting in IFRS 9.

<b>Macro cash flow hedge designation as at 1 January 20X0</b>	
Hedged item	CU50 of variable interest rate liabilities <sup>(a)</sup>
Hedging instruments	CU50 of IRS

(a) To qualify for cash flow hedge designation, variable interest rate liabilities must be highly probable for the period that at least matches the maturity of the IRS.

- 1.44 On 1 January 20X0, CU50 of variable interest rate liabilities would be required to be designated as the hedged item for the purposes of the macro cash flow hedge relationship. The existence of suitable variable interest rate liabilities matching the basis of the variable leg of the IRS is not guaranteed.
- 1.45 On 1 January 20X1, the original hedge accounting relationship remains intact, as changes in the net fixed interest rate positions do not directly affect the cash flow hedge designation, on the assumption that the required level of variable interest rate liabilities is not breached.
- 1.46 However, prospectively, an additional CU30 of variable interest rate liabilities would be required to be designated as hedged items, to offset the increase in IRSs from CU50 to CU80.<sup>10</sup>

8 The ‘fair value hedge accounting for a portfolio hedge of interest rate risk’ is included in paragraphs AG114–AG132 of IAS 39.

9 With the introduction of the hedge accounting requirements in IFRS 9 the status quo of ‘macro hedge accounting’ is broadly maintained. All cash flow hedges, including those that are colloquially referred to as ‘macro cash flow hedges’ under IAS 39, would be within the scope of the hedge accounting requirements in IFRS 9 (see paragraphs BC6.84–BC6.104 of IFRS 9) and fair value hedge accounting for a portfolio hedge of interest rate risk under IAS 39 continues to be available.

10 The term ‘offset’ in this DP does not have the meaning that it has in accordance with IAS 32 *Financial Instruments: Presentation*.

- 1.47 The above presents a scenario of ‘perfect’ hedging (assuming suitable liabilities are available), however, the unexpected prepayment of CU10 of fixed interest rate liabilities indicates that, with the benefit of hindsight, CU10 of fixed interest rate assets were unhedged once the liabilities were prepaid.

### Application of the PRA

- 1.48 Assuming the same fact pattern, the following example explores the application of the PRA to the same scenario.
- 1.49 For the purposes of simplicity, the analysis assumes that no revaluation adjustment arises from the variable interest rate loans and liabilities.

#### 1 January 20X0

Assets	CU	Liabilities	CU
Fixed interest rate loans	150	Fixed interest rate liabilities	100
Variable interest rate loans	150	Variable interest rate liabilities	200
<b>Net open risk position</b>			
Receive fixed (pay variable)	50		
<b>IRS</b>			
		Pay fixed (receive variable)	50

- 1.50 On 1 January 20X0, the loans and liabilities would be included within the managed portfolio, with CU50 of pay fixed IRS as the risk management instrument, reflecting a matched interest rate risk position. Accordingly, revaluation of the net open risk position arising from the fixed interest rate loans and liabilities for a change in the managed risk would provide an offset to the changes in the fair value of the IRS.
- 1.51 On 31 December 20X0, the net open risk position comprising CU150 of the existing fixed interest rate loans and CU90 of the remaining fixed interest rate liabilities would be revalued for the effect of changes in interest rates and the original pay fixed IRS of CU50 would be measured at fair value. Any previously recognised revaluation adjustment for CU10 of fixed interest rate liabilities would be reversed in profit or loss. This reflects that (with the benefit of hindsight) the bank had an under-hedged position (it had expected interest rate risk from CU10 of the fixed interest rate liabilities to continue).
- 1.52 Subsequently, CU20 of fixed interest rate loans and CU30 of pay fixed IRS would also be included in the PRA capturing the matched interest rate risk position. As before the revaluation of the net open risk position arising from the fixed interest rate loans and liabilities for a change in the managed risk would provide an offset to the changes in the fair value of the IRSs. Note that not all the revalued exposures and IRSs were priced on the same day (in this example, some were at 1 January 20X0 and some at 1 January 20X1). However, these differences in market interest rates reflect the evolution of the risk profile.

**1 January 20X1**

<b>Assets</b>	<b>CU</b>	<b>Liabilities</b>	<b>CU</b>
Fixed interest rate loans	150	Fixed interest rate liabilities	90
New fixed interest rate loans	20		
Variable interest rate loans	130	Variable interest rate liabilities	210
<b>Net open risk position</b>			
Receive fixed (pay variable)	80		
<b>IRS</b>			
<b>Existing IRS</b>		Pay fixed (receive variable)	50
<b>New IRS required</b>		Pay fixed (receive variable)	30

- 1.53 As can be seen from the example, application of the PRA would present a comprehensive picture of dynamic risk management in the financial statements without the complexities associated with the current hedge accounting requirements.

### **Applicability of the PRA for risks other than interest rate risk**

- 1.54 The IASB decided to focus on the way in which banks dynamically manage their interest rate risk as a starting point for the DP, because it provides a common example of a risk for which dynamic risk management is undertaken. However, the IASB's objective is to consider developing an approach to accounting for dynamic risk management that would apply across different types of risks rather than limiting its applicability to dynamic management of interest rate risk.
- 1.55 The IASB noted that dynamic risk management activities are undertaken for risks other than interest rates. For example, risk management activities exist when FX risk or commodity price risk is managed dynamically on the basis of open portfolios. The IASB is therefore interested in understanding the dynamic risk management activities for both interest rate risk and other risks of all entities. The IASB is also interested in understanding whether there is a need for an accounting approach that improves the faithful representation of dynamic risk management for risks other than interest rate risk.

<b>Question 1—Need for an accounting approach for dynamic risk management</b>
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Do you think that there is a need for a specific accounting approach to represent dynamic risk management in entities' financial statements? Why or why not?
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**Question 2—Current difficulties in representing dynamic risk management in entities' financial statements**

- (a) Do you think that this DP has correctly identified the main issues that entities currently face when applying the current hedge accounting requirements to dynamic risk management? Why or why not? If not, what additional issues would the IASB need to consider when developing an accounting approach for dynamic risk management?
- (b) Do you think that the PRA would address the issues identified? Why or why not?



## Section 2 Overview

### 2.1 Dynamic risk management

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- 2.1.1 One of the key aspects of the PRA is that it would be applied to risks that are managed on a dynamic basis. Dynamic risk management usually has the following characteristics:
- (a) risk management is undertaken for open portfolio(s), to which new exposures are frequently added and existing exposures mature; and
  - (b) as the risk profile of the open portfolio(s) changes, risk management is updated on a timely basis in reaction to the changed net risk position.
- 2.1.2 In addition, dynamic risk management may exhibit some of the following characteristics:
- (a) in the context of interest rate risk management, the objective may be to keep the net interest income from the open portfolio(s) within a targeted sensitivity to changes in market rates;
  - (b) risk management may be based on open portfolios that include exposures based on estimates in terms of volume and/or timing of the cash flows (for example, behaviouralised exposures); and
  - (c) only risk arising from external exposures is included within the managed portfolio.

Question 3—Dynamic risk management
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Do you think that the description of dynamic risk management in paragraphs 2.1.1–2.1.2 is accurate and complete? Why or why not? If not, what changes do you suggest, and why?
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### 2.2 PRA—interest rate risk

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- 2.2.1 When applying the PRA, exposures within open portfolios for which dynamic risk management is undertaken would be revalued with respect to the managed risk. This DP refers to such portfolios as managed portfolios. This revaluation offsets the effect of measuring any risk management instruments (derivative instruments for the purposes of this DP) that are used to manage those risks at fair value.
- 2.2.2 Application of the PRA changes neither the classification and measurement requirements of IFRS 9 or any other Standards nor the accounting for risk management instruments. However, the PRA does require revaluation of the managed exposures within the managed portfolio for the managed risk. The cumulative impact is that for financial instruments the IFRS 9 measurement is reflected in the financial statements adjusted only for the risk that is being dynamically managed.

- 2.2.3 Assume that an entity has a portfolio of 5-year retail loans with an annual fixed coupon of 4.5 per cent whose total amortised cost equals CU1,000.<sup>11</sup> If the market interest rate of the managed portfolio had fallen to 4.25 per cent, then the revaluation adjustment represents the discounted value of the original coupons using the prevailing market interest rate.<sup>12</sup> The revaluation adjustment when interest rate risk is dynamically managed would be calculated applying the discounted cash flow method as follows:

$$\text{CU}45 \times (1.0425)^{-1} + \text{CU}45 \times (1.0425)^{-2} + \text{CU}45 \times (1.0425)^{-3} + \text{CU}45 \times (1.0425)^{-4} + \text{CU}1,045 \times (1.0425)^{-5} - \text{CU}1,000 = \text{CU}11$$

- 2.2.4 This example is a simplified version of the calculation required by the PRA, but it illustrates that the managed exposures are not measured at fair value. They are revalued only with respect to the managed risk, which is consistent with the dynamic risk management perspective. For many banks the PRA would enable better representation of dynamic risk management activities in their financial statements and would be less burdensome than current hedge accounting requirements.
- 2.2.5 This DP explores different approaches for a better representation of an entity's dynamic risk management practices in its financial statements. One of these is the possible inclusion of exposures that are within the managed portfolio that would not be eligible as hedged items under the hedge accounting requirements in IFRS 9 and IAS 39 (for example, *equity model book (EMB)* and pipeline transactions) and the other is the inclusion of cash flows based on their expected behaviour (see Section 3).
- 2.2.6 This DP also considers two presentation alternatives that present the effect of the revaluation of the managed portfolio(s) net in a single line item in the statement of profit or loss and other comprehensive income (statement of comprehensive income), along with the fair value changes of the risk management instruments. In addition, net interest income would reflect how it has been altered by an entity's dynamic risk management activity (see Section 6). This DP also includes three presentation alternatives for the statement of financial position to reflect the effect of an entity's dynamic risk management activity on the managed exposures.

<sup>11</sup> Assuming that no premium, discount or other non-coupon related elements of the effective interest method (EIM) exist, accordingly CU1,000 is also the nominal or par value of the loans.

<sup>12</sup> Assuming that it is a flat yield curve.

## Section 3 The managed portfolio

### 3.1 Introduction

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- 3.1.1 This Section considers the following exposures for possible inclusion in the managed portfolio for the purposes of applying the PRA:
- (a) pipeline transactions (see Section 3.2); and
  - (b) equity model book (EMB—see Section 3.3).
- 3.1.2 As well as considering the type of exposure that would be eligible for inclusion in the managed portfolio(s), this Section explores the basis for determining the cash flows that would be used to revalue the exposures within the managed portfolio(s).

### 3.2 Pipeline transactions

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- 3.2.1 ‘Pipeline transactions’ is a colloquial term used to describe the forecast volumes of drawdowns on fixed interest rate products at advertised rates. These transactions may or may not be considered to be ‘highly probable’, as that term is used in IFRS 9 (see Section A3 for a discussion on ‘forecast transactions that are not pipeline transactions’).
- 3.2.2 In a typical pipeline transaction, neither a bank nor its customer yet has a contractual commitment; however, a bank may consider such offers to be binding for reputational or other reasons. This may be on the basis of an advertised offer to both current and future customers (for example, a fixed interest rate mortgage or deposit product). Economically, a bank may view the interest rate risk profile from pipeline transactions to be the same as writing a short-term, free put option to customers to enter into a fixed interest rate product at a predetermined interest rate. For dynamic risk management purposes, that bank may estimate the likely volume of customer balances to be drawn down using the free option on a behaviouralised basis and manage the resultant fixed interest rate risk attached to it.
- 3.2.3 Although some banks currently manage the interest rate risk arising from pipeline transactions as part of their dynamic risk management, there are conceptual difficulties from an accounting perspective in revaluing pipeline transactions for interest rate risk, even if such transactions are considered to be highly probable. In particular, it would result in the recognition of an asset or a liability in the statement of financial position before an entity becomes a party to the transaction. It would also presume the existence of fair value risk for exposures that have not been recognised for accounting purposes.<sup>13</sup>
- 3.2.4 Further details on pipeline transactions are provided in Section A2.

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<sup>13</sup> This is different to a fair value hedge of a firm commitment that is based on fixed interest rate risk arising from a contractual right or a contractual obligation. It is also different to a cash flow hedge of highly probable future cash flows, because, in that case, it is the exposure to cash flow variability, rather than changes in fair value, that is hedged.

### 3.3 Equity model book

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- 3.3.1 Some entities, particularly banks, notionally determine a base return on their own equity similar to interest (ie they determine target compensation for their equity holders for providing funding). When return on equity is managed in this way, it is common for dynamic interest rate risk management to be used to facilitate the attainment of a target base return. This is carried out by modelling the target base return using the targeted interest rate profile for the return on equity, as if this were an interest rate exposure. This is sometimes called a *replication portfolio*. This replication portfolio is included as an additional interest rate exposure for dynamic risk management purposes and managed along with other interest rate exposures in the managed portfolio.
- 3.3.2 If banks consider EMB as part of their dynamic interest rate risk management activities, then it may be appropriate for it to be included in the managed portfolio as an interest rate risk exposure. As a consequence, the EMB replication portfolio would be revalued for changes in the managed interest rate. In addition to capturing the risk management view, this may provide enhanced transparency to users of financial statements on a bank's ability to achieve its targeted base return on equity.
- 3.3.3 Conversely, some may disagree with the usefulness of a revaluation of the targeted base return on equity with respect to interest rate risk on the basis that they consider the approach to be either arbitrary or artificial. In its discussions, the IASB noted that although including pipeline transactions and EMB in the PRA would bring accounting closer to dynamic risk management, this raises conceptual issues. The IASB noted that the discussion on EMB and pipeline transactions highlight the question of whether complete alignment between accounting and risk management is achievable or even desirable.
- 3.3.4 Further details on EMB are provided in Section A1.

### 3.4 Behaviouralisation

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- 3.4.1 Entities often model expected cash flows, for example, the profile and volume of expected prepayments within a prepayable fixed interest rate mortgage portfolio. Dynamic risk management is usually based on the expected cash flow profile rather than on the contractual lives of the exposures. This behaviouralisation is based on the expectations of the portfolio as a whole, and not on an exposure-by-exposure basis. This DP considers whether such exposures should be included in the PRA on a behaviouralised basis.
- 3.4.2 Another example of dynamic risk management using behavioural rather than contractual terms is demand deposits. Banks do not usually manage interest rate risk from a portfolio of demand deposits on a contractual basis. Instead, for dynamic risk management purposes, banks often identify a core element of the demand deposit portfolio and treat that element as having a longer term interest rate profile, taking into consideration behavioural and other factors. This behaviouralisation is based on the expectations of the demand deposit portfolio as a whole, and not on each individual exposure. When dynamic risk management is performed this way, the portfolio revaluation is based on those

behaviouralised cash flows. This DP considers the use of behaviouralised cash flows only for the purposes of applying the PRA; using a behaviouralised approach for the PRA does not change the measurement of the demand deposit liability itself in accordance with applicable IFRSs.

<b>Question 4—Pipeline transactions, EMB and behaviouralisation</b>	
<b>Pipeline transactions</b>	
(a)	Do you think that pipeline transactions should be included in the PRA if they are considered by an entity as part of its dynamic risk management? Why or why not? Please explain your reasons, taking into consideration operational feasibility, usefulness of the information provided in the financial statements and consistency with the <i>Conceptual Framework for Financial Reporting</i> (the <i>Conceptual Framework</i> ).
<b>EMB</b>	
(b)	Do you think that EMB should be included in the PRA if it is considered by an entity as part of its dynamic risk management? Why or why not? Please explain your reasons, taking into consideration operational feasibility, usefulness of the information provided in the financial statements and consistency with the <i>Conceptual Framework</i> .
<b>Behaviouralisation</b>	
(c)	For the purposes of applying the PRA, should the cash flows be based on a behaviouralised rather than on a contractual basis (for example, after considering prepayment expectations), when the risk is managed on a behaviouralised basis? Please explain your reasons, taking into consideration operational feasibility, usefulness of the information provided in the financial statements and consistency with the <i>Conceptual Framework</i> .

### 3.5 Prepayment risk

- 3.5.1 Interest rate risk includes both repricing risk and prepayment risk. Prepayment risk can be viewed as a manifestation of interest rate risk, because prepayment behaviour is significantly influenced (although not entirely determined) by developments in interest rates. For instance, many mortgage borrowers may wish to prepay existing fixed interest rate mortgages if market interest rates decrease, so that they can refinance at lower rates.
- 3.5.2 It is common for risk management to be applied to interest rate risk from managed portfolios of prepayable instruments after applying behavioural expectations about prepayments, and not based on the contractual lives of the exposures. Changes in the economic value of inherent prepayment options impact the revaluation adjustment. This impact could be determined differently depending on how the prepayment risk is managed. For example, the impact could be determined through modifications in the cash flows that incorporate the behaviouralisation if prepayment risk is managed based on

behaviouralised cash flows or through the revaluation of the inherent prepayment option if it is managed using options.

- 3.5.3 For example, a bank has a CU500 million portfolio of 2-year fixed interest rate mortgage loans, made up of a large number of individual customer loans. The bank might expect that in 12 months' time CU50 million of the portfolio will have been prepaid, with no subsequent prepayments until maturity. The bank will not be able to predict which customer loans will prepay, nor does it expect 10 per cent of every customer loan to prepay, but just that an amount of CU50 million will be prepaid from that portfolio. The interest rate risk for dynamic risk management purposes would be considered similar to the interest rate risk from CU50 million of 1-year and CU450 million of 2-year fixed-rate lending.
- 3.5.4 If prepayable portfolios are managed on a behaviouralised basis, then including behaviouralised cash flows in the managed portfolio to apply the PRA reflects dynamic risk management (in this example, CU50 million of 1-year and CU450 million of 2-year fixed-rate lending). Such behaviouralisation, to an extent, estimates the value of the prepayment option by capturing the exposure to interest rate risk through the behavioural cash flow profile rather than through direct valuation of the prepayment option. When prepayment expectations change, this affects the revaluation adjustment, because managed exposures would be updated to reflect current expectations.<sup>14</sup>
- 3.5.5 Banks may choose to manage interest rate risk arising from prepayment risk using interest rate options (for example, *swaptions*), but it is unusual for a bank to manage its entire interest rate risk exposure using only options. Some use a combination of options and swaps, and some model the prepayment risk from factors that are not interest-rate related and manage those risks without optionality and then use options for the remaining profile. Other banks may use options to hedge the portion of the managed portfolio that they believe has the highest prepayment uncertainty.
- 3.5.6 Risk managers may also use options as risk management instruments to protect only the net open risk position from changes in the downside risk, because the risk manager wants to be able to participate in favourable changes (ie upside risk). This is often referred to as hedging 'one-sided risk'.
- 3.5.7 If the aim of the PRA is to reflect dynamic risk management, then some might argue that when hedging one-sided risk, the revaluation adjustment for the managed risk should reflect the fact that dynamic risk management is of a one-sided risk. For example, a risk manager decides to hedge the net interest income against a reduction in a benchmark index below 5 per cent. If the managed risk for accounting purposes was identified as a one-sided benchmark risk (ie the risk of the benchmark index going below 5 per cent), then the revaluation of the managed exposures would only be calculated if and when the benchmark index does fall below 5 per cent.<sup>15</sup>

<sup>14</sup> In the numerator, cash flows will be amended to reflect updated prepayment expectations.

<sup>15</sup> This is similar to the calculation of fair value hedge adjustments for designated exposures in accordance with paragraph 6.3.7(a) of IFRS 9 when hedging for 'one-sided' risk using options.

- 3.5.8 However, it is highly unlikely that the whole managed portfolio will be managed for the one-sided risk determined at a constant level, because dynamic risk management is undertaken continuously. Hence knowing the level at which to restrict the managed risk would be difficult. For example, would 5 per cent be the correct level for the managed portfolio that has been dynamically managed over time? Risk management options would have been entered into with different terms, including different strike rates. Accordingly, restricting the managed risk appropriately for one-sided risk could be operationally challenging.
- 3.5.9 The issue is further complicated when managed portfolios that do not include optionality are risk managed using a mixture of risk management instruments, with and without optionality. Because of the dynamic nature of risk management, it would be very difficult to identify the managed exposures within the portfolio for which one-sided risk was managed, and those for which all changes in risk were managed in order to revalue them accordingly.

<b>Question 5—Prepayment risk</b>
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When risk management instruments with optionality are used to manage prepayment risk as part of dynamic risk management, how do you think the PRA should consider this dynamic risk management activity? Please explain your reasons.
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### 3.6 Amendments to managed exposures due to changes in expected customer behaviour

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- 3.6.1 The PRA would require that changes in the behaviouralisation of cash flows that are included within managed portfolios be reflected when determining the revaluation adjustment arising from those portfolios. Any changes in the revaluation adjustment, consistent with other changes in revaluation, would be recognised in profit or loss.
- 3.6.2 Dynamic risk management activities may be undertaken to mitigate a new risk profile once the new risk is identified, but any adjustments made to risk management instruments to capture the new risk profile will only reflect the corrective action prospectively. The PRA would recognise the impact of changes from past assumptions through profit or loss when and to the extent that they occur.
- 3.6.3 For example, an entity initially behaviouralised an exposure as a 4-year fixed interest rate exposure based on its prepayment assumptions. The entity transacted a 4-year derivative to eliminate the 4-year interest rate risk. If after six months the exposure was expected to be prepaid in five years' time (ie one year and six months later than originally thought), the revaluation adjustment for the managed portfolio would reflect the current value of the exposure with respect to the managed risk, assuming a remaining 5-year term, whereas the fair value of the derivative is based on its remaining life of three years and six months. The resulting net impact of those two

remeasurements on profit or loss reflects the outcome that is currently expected and is different to the bank's original prepayment assumptions.

**Question 6—Recognition of changes in customer behaviour**

Do you think that the impact of changes in past assumptions of customer behaviour captured in the cash flow profile of behaviouralised portfolios should be recognised in profit or loss through the application of the PRA when and to the extent they occur? Why or why not?

### 3.7 Bottom layers and proportions of managed exposures

- 3.7.1 Many banks undertake dynamic risk management of portfolios with prepayable exposures by applying a so-called 'bottom layer' approach. For example, assume that a bank has a CU100 million portfolio of prepayable fixed interest rate loans with a 5-year contractual maturity. The bank expects loans that have a total principal amount of CU35 million to have been prepaid before the end of the contractual term. Therefore, CU65 million is expected to remain outstanding for the full five years. The bank may decide to transact a 5-year swap to pay fixed interest and receive variable interest on a notional amount of CU60 million, ie effectively swapping the interest on CU60 million of the expected CU65 million, recognising that there is a margin of error in the behaviouralisation estimate. For dynamic risk management purposes, as long as the CU60 million of loans remain outstanding for the full contractual term, the dynamic risk management activity is considered a success by the bank. It has been suggested that any accounting approach for this dynamic risk management activity should reflect this bottom layer approach.
- 3.7.2 Unless a revaluation of the managed risk is undertaken for the whole portfolio to which the PRA is applied, some of the benefits of the approach will not be realised as not all the characteristics of the managed exposures will be represented. In addition, it will not be possible to include a bottom layer approach within the managed portfolio without introducing tracking and amortisation. When considering a bottom layer, a bank cannot determine which exposures within the portfolio make up the bottom layer and which exposures do not. Thus, unless all exposures making up the portfolio are homogenous, difficulties will arise when determining the revaluation adjustment for the bottom layer.<sup>16</sup>
- 3.7.3 The PRA is simplest to apply if all exposures in the managed portfolio are revalued so that there is no need to track the period over which exposures are revalued and no amortisations are necessary. If a bottom layer or proportions approach were introduced then it would involve amortisation and tracking requirements when changes to the level of the bottom layer or proportion occur.
- 3.7.4 The inclusion of a bottom layer approach within the PRA would ignore the prepayment risk within the portfolio, unless and until prepayments are so high

<sup>16</sup> Open portfolios are unlikely to be homogeneous as new exposures will be added with terms based on different market conditions.



that the bottom layer is breached. Even for homogenous portfolios, the level of the bottom layer that is being managed may change (in the example in paragraph 3.7.1, the bank may wish to increase the risk being mitigated to CU64 million from the initial level of CU60 million).

- 3.7.5 A bottom layer approach ignores prepayment risk in accounting for dynamic interest rate risk management. This appears to contradict the fact that the bottom layer approach is applied taking into account the prepayment risk. In the example in paragraph 3.7.1, the reason why the bank separated the mortgage portfolio into the upper and bottom layers is that it estimated that the amount of prepayments would be CU35 million. The inverse assumption is that the bank expects no prepayment in the bottom layer (CU65 million). A bottom layer approach would measure only the repricing risk of that bottom layer; the prepayment risk that exists and that is deemed to be concentrated in the upper layer is ignored for the purposes of applying the PRA. If changes in the value of the prepayment option of the top layer are not captured, either by valuing the prepayment option itself or by updating and revaluing the behaviouralised cash flows, then a main characteristic of the prepayable portfolio with respect to interest rate risk would not be captured in the revaluation.
- 3.7.6 Similar issues would occur if the revaluation of a managed portfolio were based on a proportion of the exposures within that portfolio and the hedged proportion increased from, say, 80 per cent to 90 per cent. In this case, the additional 10 per cent to be revalued for the first time would require tracking and amortisations and would increase operational complexity.

<b>Question 7—Bottom layers and proportions of managed exposures</b>
If a bottom layer or a proportion approach is taken for dynamic risk management purposes, do you think that it should be permitted or required within the PRA? Why or why not? If yes, how would you suggest overcoming the conceptual and operational difficulties identified? Please explain your reasons.

### 3.8 Risk limits

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- 3.8.1 Risk managers decide both how to manage net open risk positions and the extent of the risk that they wish to mitigate through hedging. In the case of the latter, the activities of risk managers are usually controlled by delegated *risk limits*. Risk limits are thresholds set for risk levels that entities (for example, banks) are willing and/or entitled to bear, ie risk levels that they can accept. Consequently, risk limits are entity-specific thresholds that trigger whether an entity needs to undertake risk mitigation through hedging.
- 3.8.2 As long as a net open risk position remains within a bank's risk limit, the bank would conclude that there is no need to undertake any steps to mitigate the net open risk position, because that level of risk is acceptable to the bank. This means that the bank perceives its dynamic risk management as being 'successful' as long as its net open risk position is within its established risk limits. Conversely, when a bank's net open risk position is outside its risk limits,

the bank reacts and adjusts its net open risk position in order to avoid a situation in which it is exposed to a higher risk than it is willing to tolerate.

- 3.8.3 In accounting terms, the concept of risk limits could imply that there should be no volatility in profit or loss as long as the net open risk position is within the risk limits set by management. Proponents of this view believe that this would align accounting with the dynamic risk management perspective. The question is whether it would be appropriate to incorporate the concept of risk limits into the PRA for the purposes of generating information that is useful, while preserving a degree of operational feasibility.
- 3.8.4 The IASB observed that, notwithstanding the fact that the consideration of risk limits in the PRA reflects an aspect of dynamic risk management, its incorporation would represent a significant conceptual challenge. The IASB noted that if compliance with a bank's own risk limits resulted in no profit or loss volatility within the PRA, this could lead to counterintuitive results. In particular, the wider the risk limits are (reflecting an entity's greater risk tolerance), the less volatility the profit or loss would show. Consequently, the preliminary views of the IASB show little support for incorporating a risk limits approach into the PRA.

<b>Question 8—Risk limits</b>
Do you think that risk limits should be reflected in the application of the PRA? Why or why not?

### 3.9 Core demand deposit portfolios

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- 3.9.1 This Section discusses a key aspect of how banks manage net interest income and in particular their deemed exposure to interest rate risk arising from core demand deposits. In order for the PRA to faithfully represent dynamic risk management activities, it would need to reflect the management of core demand deposits on a behavioural rather than a contractual basis. This Section discusses this issue.
- 3.9.2 Banks often view core demand deposits as creating interest rate risk. Core demand deposits may include demand deposits, such as current account balances, savings accounts and other accounts that behave in a similar manner. These customer deposits or accounts usually pay a zero or low, stable interest rate. Interest rates paid on these deposits are generally insensitive to changes in market interest rates. While these deposits can be withdrawn at little or short notice, typically they are left as a deposit for a long and generally predictable time despite the low interest paid.
- 3.9.3 Even though the total balance from all such customer deposits may vary, a bank typically determines a level of core demand deposits that it believes will be maintained for a particular time frame, and hence will behave for that time frame like a term fixed interest rate exposure from an interest rate risk perspective. The bank cannot determine which customer deposits will make up the core demand deposits. Existing and new deposits are fungible for dynamic

interest rate risk management purposes as new deposits will usually be on the same terms as any withdrawn deposits that they replace. The proportion of the total demand deposits identified as core demand deposits will vary among banks, by jurisdiction and over time.

- 3.9.4 Although demand deposits technically make up a variable interest rate portfolio, because the rate could theoretically be reset every night, the reset rates are normally insensitive to changes in market interest rates. As a result, these deposits behave more like a fixed interest rate portfolio. Asset liability management (ALM) captures this aspect of the behaviour by assuming that there is a deemed exposure to interest rate risk arising from such deposits.
- 3.9.5 When managing interest rate risk, banks treat core demand deposits differently to the rest of the demand deposit balance. Given the assumed stable nature of the core demand deposits, banks treat them as fixed interest rate funding and impute a fixed market interest rate and term for dynamic risk management purposes. The maturity that banks impute is driven by a variety of factors, which usually include both the expected behaviour of existing and new customers and macroeconomic factors. The residual level of demand deposits (ie those that are not considered part of the core demand deposits) are usually included within dynamic risk management analyses as overnight deposits, consistent with their contractual terms.
- 3.9.6 For example, assume a bank has an overnight asset portfolio that is entirely funded by demand deposits. If viewed solely from the contractual perspective of the exposures, the portfolio is naturally hedged without the need for additional risk management instruments. However, the portfolio is not regarded in that manner from a dynamic risk management perspective. This is because if market interest rates were to fall, the overnight interest receivable on the asset portfolio would similarly fall, but there would be no, or only a minimal, change to interest that is payable on the demand deposit portfolio, because banks generally do not re-price their demand deposits in line with market interest rates. Hence, net interest income would be reduced.
- 3.9.7 However, if a longer term fixed nature is deemed for the core element of the demand deposit portfolio, this would better match the behaviour of the associated interest rate that is payable on those deposits. This can be illustrated as follows: if the interest rate risk on a core demand deposit portfolio was deemed to be that of a 5-year fixed interest rate liability, then risk managers would transact a 5-year IRS to receive fixed interest and pay overnight interest. This would eliminate the interest rate mismatch that is expected to arise. On the assumption that the core demand deposits remain insensitive to changes in market interest rate risk during the 5-year period, net interest income would be stabilised for that period. This is further illustrated in the following table:<sup>17</sup>

<sup>17</sup> The example is based on a dynamic risk management strategy to fully lock in net interest income for the net open risk position, but this will not always be the case. However the rationale for behaviouralising a core element of a demand deposit portfolio is the same when the dynamic risk management objective is to alter the profile, rather than fully eliminate the interest rate risk.

Financial instrument	Interest basis	Example
Core demand deposit portfolio	Pay: static interest rate	Pay: 0.1%
Overnight asset portfolio	Receive: overnight interest rate plus customer margin	Receive: OIS <sup>(a)</sup> + 2% (customer margin)
IRS	Pay: overnight interest rate Receive: 5-year fixed interest rate	Pay: OIS Receive: 3%
Net interest income	Receive: 5-year fixed interest rate plus customer margin less (static) interest rate on core demand deposits	Receive: 4.9% = 3% + 2% – 0.1%

(a) Overnight index swap (OIS)

- 3.9.8 At the end of the 5-year period the IRS and the deemed fixed interest rate core demand deposit portfolio will ‘mature’, leaving only a variable interest rate asset portfolio on which the entity receives interest at the prevailing overnight rate, and a core demand deposit portfolio paying the same/similar interest rate as five years before. If prevailing market rates have changed, it will affect the net interest income from then on, resulting in a cliff effect at the end of five years.<sup>18</sup> ALM could again deem the core element of the demand deposit to be a 5-year fixed interest rate exposure and transact a new 5-year IRS to eliminate the interest rate risk position prospectively. However, this only locks in the net interest income at the time and it provides no protection against the cliff effect. Consequently, many banks assume that the core demand deposits will behave like a series of overlapping tranches of fixed-term deposits maturing at different times. This avoids the cliff effect and, in their view, better represents the economic position. As one tranche of deemed fixed term deposits matures it will then be rolled over for another term. These tranches form a replication portfolio. From a dynamic risk management perspective, once the risk position from the core demand deposit replication portfolio has been determined, it is treated in the same way as any external fixed interest rate exposure and is fully integrated into the overall managed portfolio.
- 3.9.9 The deemed term and volume of the tranches are key drivers of the interest rate risk and are determined based on a number of factors, for example, the historical pattern of demand deposit levels. In addition, in determining the term for the replication portfolio tranches, banks may also consider the period over which they expect the interest rate payable on the actual deposits to remain unchanged.
- 3.9.10 The IASB’s preliminary view is that the PRA should incorporate this element of dynamic risk management in the accounting. Under the PRA the deemed interest rate profile of the core demand deposit portfolio is considered as part of the managed portfolio. The approach captures the exposure to interest rate risk

<sup>18</sup> Using the same example, if at the end of the 5-year period, when the IRS matures, assume that the prevailing rate has fallen to 2 per cent, this would result in a reduction in net interest income from the 4.9 per cent achieved over the past 5-year period to 3.9 per cent (= 2% + 2% – 0.1%), assuming no changes have occurred to demand deposit rates or customer margins.

that arises when behaviouralisation of demand deposits is taken into consideration, consistent with dynamic interest rate risk management by banks.

- 3.9.11 Such an approach captures and represents the interest rate risk profile that is viewed as being embedded in such core demand deposits. Applying the actual net interest income presentation alternative,<sup>19</sup> net interest income would still reflect the actual (overnight) interest paid on the demand deposits, if any, and not the deemed interest rates.
- 3.9.12 When core demand deposits are revalued for the managed risk it measures the effect on the deemed interest profile that might be offset by derivatives that are entered into to stabilise the net interest income. If the PRA were to be applied based on the contractual terms of the demand deposits and the behavioural assumptions used by dynamic risk management were to be ignored, revaluation volatility would result, implying a net open risk position that dynamic risk management do not believe exists.
- 3.9.13 The selection of an appropriate term and volume of the core demand deposits is dependent on a number of factors, some of which involve significant judgement. This would particularly be the case if no criteria are established to determine the terms of the replication portfolios that can be included in the managed portfolios on application of the PRA. If the term of the core demand deposits were to change (ie existing assumptions used for dynamic risk management are amended), this would have an impact on the revaluation adjustment and hence on profit or loss.
- 3.9.14 The identification of a core demand deposit layer within the wider demand deposit portfolio could be described as a bottom layer. However, applying the PRA to the core element of demand deposits does not assume that the top layer has all of the prepayment risk. Any withdrawals that occur earlier than expected are replaced with no impact on the revaluation as the deposits within the portfolio tend to be homogenous unlike portfolios, such as fixed interest rate loan portfolios, in which new loans may have different features.
- 3.9.15 As selecting an appropriate term and volume for core demand deposits involves judgement, information that reflects the deemed interest rate risk profile from these deposits may be useful to users of financial statements. Additional disclosures on key assumptions (for example, expected or behavioural maturity) may be helpful for users of financial statements to understand the effect of considering such exposures and their relevance in dynamic risk management. In addition, it may be appropriate to consider whether guidance is required to determine the behaviouralised profile of core demand deposits for the purposes of inclusion in the PRA.
- 3.9.16 In its discussions, the IASB noted that although including behaviouralisation of core demand deposits in the PRA would contribute to a better representation of dynamic risk management, it would raise some significant issues concerning the recognition of revaluation gains or losses in the financial statements arising

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<sup>19</sup> The discussion on sub-benchmark transactions in Section 3.10 is relevant for the presentation of interest expense arising from core demand deposits in the statement of comprehensive income, because the contractual deposit rate will usually be below the inferred market interest rate on the replication portfolios.

from the application of the PRA. For example, in some cases it is difficult to assess whether changes in core demand deposits are the result of changes in customers' behaviour, the reflection of a bank's actions responding to its assessment of interest rate risk or the effect of other factors such as liquidity risk.

**Question 9—Core demand deposits**

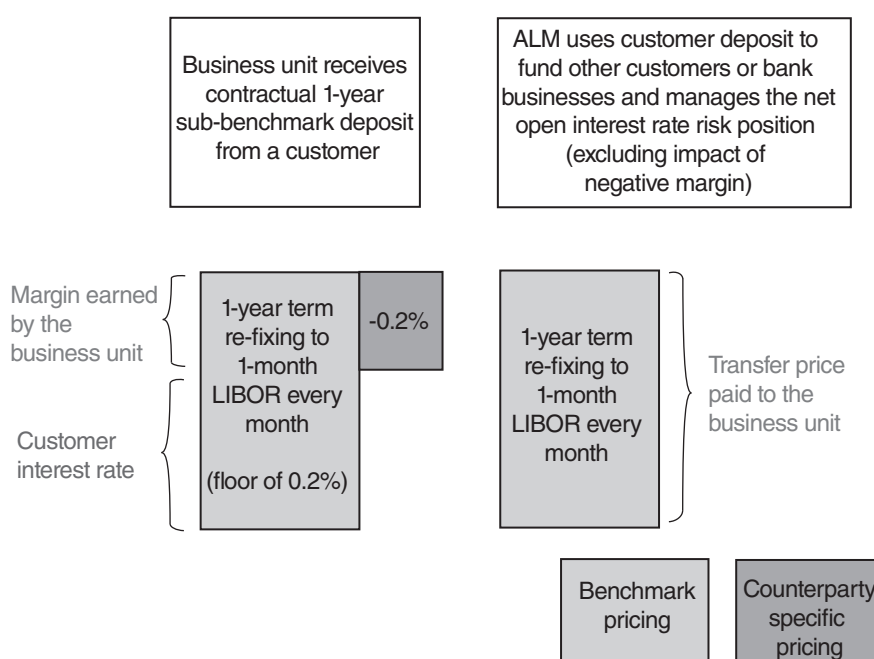
- (a) Do you think that core demand deposits should be included in the managed portfolio on a behaviouralised basis when applying the PRA if that is how an entity would consider them for dynamic risk management purposes? Why or why not?
- (b) Do you think that guidance would be necessary for entities to determine the behaviouralised profile of core demand deposits? Why or why not?

### 3.10 Sub-benchmark rate managed risk instruments

- 3.10.1 Some financial instruments are priced at an interest rate based on a benchmark index less a margin. These are often referred to as 'sub-benchmark instruments' (for example, sub-LIBOR instruments). It is common for only the benchmark interest rate risk from these financial instruments to be included within dynamic risk management. This Section discusses whether the application of the PRA to such exposures should reflect the benchmark interest rate risk that is dynamically managed or the actual sub-benchmark risk of the exposure.
- 3.10.2 When sub-benchmark financial instruments pay a variable interest rate that is linked to the benchmark, they generally include an embedded floor so that the coupon cannot be negative. Typically, risk managers do not include the interest rate risk from the embedded floor within their managed portfolio.
- 3.10.3 Transfer pricing plays a critical role in distinguishing the profits and responsibilities in business units (ie managing customer margin such as lending margin and deposit margin) and those in ALM (ie managing net open interest rate risk positions with respect to changes in the funding index). ALM usually manages interest rate risk on exposures (including sub-benchmark instruments) using *transfer prices* that are based on the benchmark funding yield curve, without including any customer or product margin (see Section 4.2). Generally, this is because customer and product margin risk is the responsibility of the transacting business unit. Specific to sub-benchmark margins, it is also because the risk of narrowing the margin that may materialise when the benchmark index falls usually remains with the business unit and so is out of the scope of dynamic risk management by ALM.
- 3.10.4 However, the embedded floor has an economic effect on the bank's interest rate risk profile. For example, if a bank funded its fixed interest rate asset portfolio with a portfolio of sub-LIBOR deposits and wished to achieve a stable net interest income, it might transact an IRS, paying a fixed interest rate and receiving LIBOR. Such a strategy would lock in a stable net interest income, unless LIBOR

fell below the level of the (negative) margin. In that case, if the portfolio has a floor, the stable net interest income would no longer be achieved. Therefore, when accounting for recognised variable rate sub-benchmark financial instruments as part of the managed portfolio, the effect of the embedded floor needs to be considered.

- 3.10.5 The following diagram illustrates the typical approach to the transfer of interest rate risk to ALM (via transfer pricing transactions) for exposures that are priced to a benchmark index less a margin. It shows that the risks transferred to ALM via transfer pricing transactions for sub-benchmark instruments are not likely to include the negative margin and the associated embedded floor.



- 3.10.6 Transfer pricing transactions raise other complications in addition to not reflecting the embedded floor in contractual sub-benchmark exposures. The difficulty is that the deemed cash flows that arise from transfer pricing transactions (for example, 1-month LIBOR) are greater than the actual cash flows that occur on the external exposure that is part of the managed portfolio (for example, 1-month LIBOR - 0.2%).

- 3.10.7 Nevertheless, in situations in which the interest rate on external exposures includes a negative margin (ie when the interest rate is the benchmark index less a margin), there is an expectation that the negative margin should be presented in the statement of comprehensive income in a similar way to positive margins (ie when the interest rate is the benchmark index plus a margin), and so it should be accrued in net interest income separately from the dynamic risk management activity. This is because the margin (negative or positive) is a feature of the bank's underlying business and is not created by the dynamic risk management of interest rate risk. Dynamic risk management will, however,

influence net interest income, because it attempts to stabilise an entity's net interest income by managing mismatches between fixed and variable interest rate exposures.

- 3.10.8 Although this DP considers the issue in the context of interest rate risk, the same consideration applies in the case of other risks as well. For example, in some jurisdictions non-financial items may be priced below the established benchmark for such items. Consequently, the same issue would arise when an entity dynamically manages such a portfolio of non-financial exposures when the managed risk is the benchmark index.
- 3.10.9 Some believe that it would not be appropriate for any accounting approach for dynamic risk management of sub-benchmark instruments to ignore the effect that the embedded floor has on a strategy to stabilise the net interest income. However, others believe that if the purpose of the accounting approach is to represent dynamic risk management, then the embedded floor is not relevant if it is not included within dynamic risk management.
- 3.10.10 The sub-LIBOR issue was discussed at length by the IASB as part of the deliberations of the hedge accounting requirements in IFRS 9. However, those discussions focused on whether LIBOR could be determined to be a risk component of the hedged item, and whether a component could ever be greater than the exposure itself. When dynamic risk management is undertaken to alter the profile of net interest income, it is possible that it is not necessary under all circumstances that the managed risk be a component of the managed exposures.
- 3.10.11 The hedge accounting requirements in IFRS 9 and IAS 39 do not allow an entity to designate a full LIBOR component in a financial instrument that yields LIBOR less a spread.<sup>20</sup> The Basis for Conclusions on IFRS 9 *Financial Instruments* (Hedge Accounting and amendments to IFRS 9, IFRS 7 and IAS 39) explains the reasons for this as follows:

BC6.27 In its deliberations, the focus was primarily on the sub-LIBOR scenario although the issue is not unique to that situation (see paragraphs BC6.217–BC6.229). In that context, the IASB noted that, for risk management purposes, an entity normally does not try to hedge the entire interest rate of a financial instrument but rather the change in the variability of the cash flows attributable to LIBOR. Such a strategy protects an entity's exposure to benchmark interest rate risk and, importantly, the profit margin of the hedged items (ie the spread relative to the benchmark) is protected against LIBOR changes. This is, of course, only feasible if LIBOR does not fall below the absolute value of the negative spread. However, if LIBOR does fall below the absolute value of that negative spread it would result in 'negative' interest, or interest that is inconsistent with the movement of market interest rates. Consequently, in contrast to exposures with full LIBOR variability, hedging sub-LIBOR exposures means that the entity remains exposed to

<sup>20</sup> IFRS 9 introduces the concept of hedge accounting of components of non-financial items so this principle is also applied to components of non-financial items.



cash flow variability in some situations. The IASB noted that allowing a designation that ignores this fact would not faithfully represent the economic phenomenon.

BC6.28 Consequently, in the Standard the IASB retained the restriction in IAS 39 for the designation of risk components when the designated risk component exceeds the total cash flows of the hedged item. However, hedge accounting would still be available in such situations if all the cash flows hedged for a particular risk are designated as the hedged item.

3.10.12 If those considerations are applied to the PRA, it may be difficult to argue that the PRA should include the benchmark interest rate risk in revaluations for sub-benchmark instruments. The same arguments would apply for all exposures based on *sub-benchmark rates*, whether they are interest rates or commodity prices.

3.10.13 However, the PRA is not a modification to hedge accounting. Instead, it is a new approach for accounting to be more aligned with dynamic risk management. In view of the difference in objectives of the PRA and the hedge accounting requirements in IFRS 9 and IAS 39, the IASB considered it appropriate to include a discussion on how dynamic risk management of sub-benchmark interest rates could be reflected in the PRA in the DP in order to receive feedback from interested parties. However, further consideration may be necessary to determine whether the concerns raised in the discussions on IFRS 9 are relevant when applying the PRA.

3.10.14 In summary, if transfer pricing transactions with the managed risk being the benchmark index were permitted to represent the interest rate risk from sub-benchmark instruments in the managed portfolio, then the following issues would need to be addressed:

<b>Variable interest rate financial instruments</b>	<b>Fixed interest rate financial instruments</b>
Deemed cash flows in transfer pricing transactions (for example, 1-month LIBOR) exceed actual customer cash flows (for example, 1-month LIBOR – 0.2%).	Deemed cash flows in transfer pricing transactions (for example, 2.6 per cent) exceed actual customer cash flows (for example, 2.4 per cent).
Many financial instruments have an embedded floor.	

3.10.15 Potential approaches to deal with the issues identified above within the PRA are as follows:<sup>21</sup>

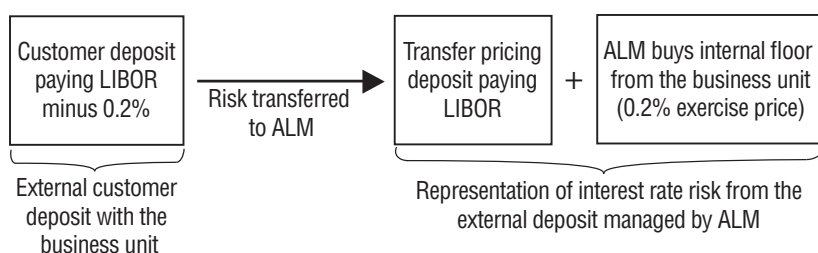
<sup>21</sup> Throughout this table, LIBOR could be interpreted as the fixing rate for a variable interest rate instrument or as the appropriate fixed interest rate derived from a LIBOR curve for fixed interest rate instruments.

	<b>Approach 1</b>	<b>Approach 2</b>	<b>Approach 3</b>
	<b>Full customer deposit discounted at benchmark index</b>	<b>Full customer deposit discounted at benchmark index with static margin</b>	<b>Risk included in ALM (transfer pricing)</b>
Cash flows (numerator)	Customer contractual cash flows (for example, LIBOR – 0.2%)	Customer contractual cash flows (for example, LIBOR – 0.2%)	Benchmark pricing cash flows (for example, LIBOR)
Initial discount rate (denominator)	Initial benchmark index (for example, LIBOR)	Initial customer deposit rate (for example, LIBOR – 0.2%)	Initial benchmark index (for example, LIBOR)
Subsequent discount rate (denominator)	Current benchmark index (for example, LIBOR)	Adjusted for benchmark changes but margin kept static (for example, LIBOR – 0.2%)	Current benchmark index (for example, LIBOR)
Day 1 revaluation difference	Difference between the present value and the implied par value	Nil	Nil
Interest recognition  (based on actual net interest income presentation—see Section 6.1)	Actual coupon on customer deposit accrued, including the effect of the negative margin (and any embedded floor) (for example, LIBOR – 0.2%)	Actual coupon on customer deposit accrued, including the effect of the negative margin (and any embedded floor) (for example, LIBOR – 0.2%)	Actual coupon on customer deposit accrued, including the effect of the negative margin (and any embedded floor) (for example, LIBOR – 0.2%)
Revaluation effect from dynamic risk management	<i>Clean revaluation</i> of contractual cash flows with respect to changes in benchmark index plus amortisation/accretion of Day 1 revaluation difference	Clean revaluation of contractual cash flows with respect to changes in benchmark index (discount rate includes static negative margin)	Clean revaluation of benchmark cash flows with respect to changes in benchmark index

3.10.16 All three approaches present the same interest profile in profit or loss, ie actual coupon payable on the customer deposits. The differences arise when determining the revaluation adjustment. Using Approaches 1 and 2, the cash flows included within the revaluation would be based on the actual deposit rate, whereas Approach 3 would only revalue the benchmark cash flows, consistently with the dynamic risk management approach. Consequently, the revaluation adjustments from Approaches 1 and 2 will include changes in the discounting effect both on the benchmark cash flows and on the negative margin. In addition, the revaluation effect from Approach 1 will include the unwind of the Day 1 revaluation effect. However, this will be offset by the amortisation of the Day 1 revaluation difference over time.

## Embedded floor

- 3.10.17 None of the approaches in paragraph 3.10.15 recognise the effect of the embedded floor on future interest cash flows for variable interest rate financial instruments. In order for the risks from the embedded floor to be reflected in the accounting for dynamic risk management, the value of the embedded floor in sub-benchmark variable interest rate financial instruments should be included in the revaluation adjustment. This could be achieved by introducing an internal floor transaction as well as the usual internal benchmark deposit through transfer pricing. The following diagram illustrates this approach:



- 3.10.18 In this example, the LIBOR deposit and the 0.2 per cent floor would together represent the interest rate risk from the external deposit managed by ALM. The revaluation adjustment would include the current value of the floor and the LIBOR transfer pricing deposit.
- 3.10.19 Such an approach overcomes some of the difficulties that were identified earlier in this Section and builds on existing transfer pricing transactions. However, the introduction of a floor between the business unit and ALM could represent a change to both operational and dynamic risk management practices.

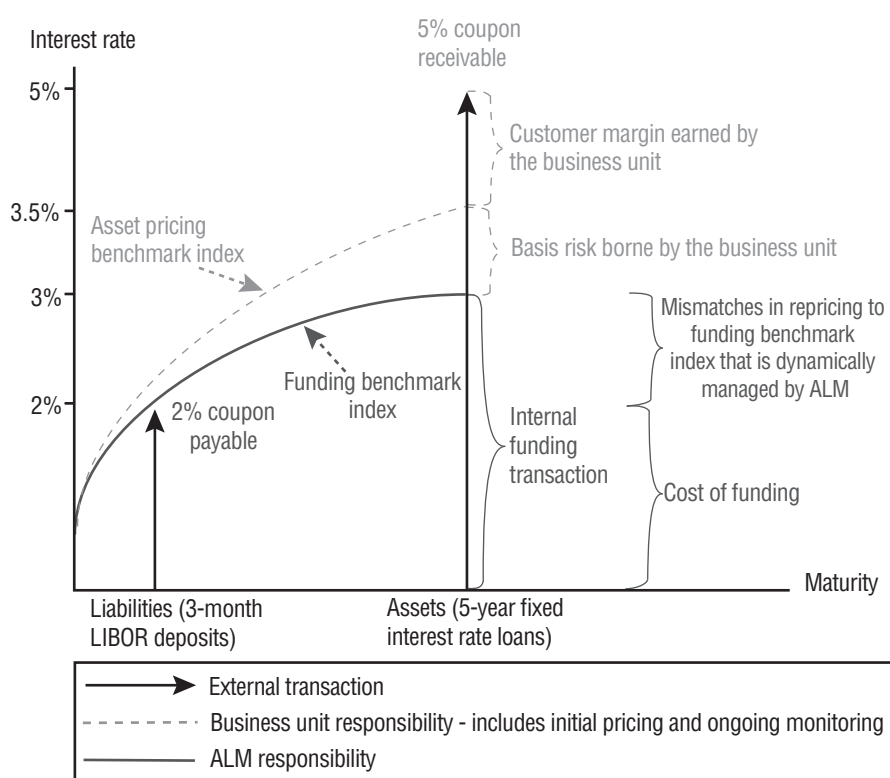
<b>Question 10—Sub-benchmark rate managed risk instruments</b>	
(a)	Do you think that sub-benchmark instruments should be included within the managed portfolio as benchmark instruments if it is consistent with an entity's dynamic risk management approach (ie Approach 3 in Section 3.10)? Why or why not? If not, do you think that the alternatives presented in the DP (ie Approaches 1 and 2 in Section 3.10) for calculating the revaluation adjustment for sub-benchmark instruments provide an appropriate reflection of the risk attached to sub-benchmark instruments? Why or why not?
(b)	If sub-benchmark variable interest rate financial instruments have an embedded floor that is not included in dynamic risk management because it remains with the business unit, do you think that it is appropriate not to reflect the floor within the managed portfolio? Why or why not?

## Section 4 Revaluing the managed portfolio

### 4.1 Revaluation of the managed exposures

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- 4.1.1 Under the PRA net open risk positions are determined based on managed exposures that are included in managed portfolios. The revaluation of the net open risk position(s) is determined using present value techniques. The cash flows to be discounted and the discount rates would be identified with reference to the managed risk. It would not be a full fair value remeasurement of the managed exposures. Consistent with dynamic risk management, which is typically undertaken on a 'by risk' basis, the revaluation would be determined by managed risk. The identification of the managed exposures making up the managed portfolio and the revaluation for accounting purposes would need to reflect the dynamic risk management objective.
- 4.1.2 The revaluation of managed exposures for interest rate risk and that are subject to the PRA would be calculated as follows:
- (a) the cash flows that represent the exposure to the interest rate risk (numerator) that is being managed is discounted at the current rate for that risk (denominator).
  - (b) the numerator is a set of cash flows whose determination depends on whether it relates to fixed or variable interest rate exposures:
    - (i) for fixed interest rate exposures, cash flows are based on the interest rate level that corresponds to the risk that the entity manages at the time when the financial instruments first gave rise to exposure to interest rate risk and do not change from the initial level.
    - (ii) for variable interest rate exposures, cash flows are based on the relevant interest rate that corresponds to the risk that the entity manages at the time of calculating the present value. These cash flows are updated by projecting future variable contractual interest cash flows using the forward curve and the most recent fixing for the current interest period (if applicable).
  - (c) the discount rate in (a) representing the denominator is always updated for both fixed and variable interest rate exposures. It is the rate that is current at the time that the present value is calculated. Changes in the components of the interest rates that do not form part of the managed risk, such as those relating to credit risk and instrument liquidity, will not be part of the revaluation adjustment. Consequently, identification of the managed risk is critical for the purposes of applying the PRA.
- 4.1.3 The following diagram illustrates the focus of ALM that manages interest rate risk in assets and liabilities in a centralised and comprehensive manner. It is a simplified example but illustrates the key interest rates that a bank typically considers when pricing customer loans and associated funding for the business unit that is transacting with those external customers. It also illustrates how a bank earns net interest income and its source.



4.1.4 The pricing of external customer lending may be based on a particular benchmark index that will then be adjusted to include customer-specific lending margins. The customer lending is typically internally funded by ALM, through a transfer pricing transaction.<sup>22</sup> This transfer pricing transaction not only represents the funding from ALM, but it also represents the methodology by which interest rate risk positions are aggregated in ALM for inclusion in dynamic risk management. In the diagram in paragraph 4.1.3, ALM receives interest payments from the business unit based on 5-year funding. In turn the business unit may or may not use this as the basis for pricing the customer lending.

4.1.5 ALM dynamically manages the resultant interest rate risk from the net open risk positions that it has assumed through such transfer pricing transactions. This reflects actual funding raised by the bank, which in this case is assumed to be 3-month LIBOR funding. In the above example, the internal funding provided to the lending unit is priced based on the benchmark cost of funding for the bank (a funding index—the solid curve in the diagram). This is representative of a dynamic risk management objective to alter the net interest income earned with regard to changes in the bank's benchmark funding index (ie the bank's cost of

<sup>22</sup> A 'transfer price transaction' in this context does not necessarily mean an actual or real transaction between business units and ALM. The term is used in this case to mean a 'mechanism to allocate profits and risk between business units and ALM'.

funding) rather than the pricing index on which the customer lending is based. Mismatches in repricing to the funding benchmark interest index curve are dynamically managed by ALM (mismatches such as the 5-year funding rate received by ALM versus the 3-month LIBOR funding rate paid in the example). Consequently, in this example, the net open risk position should be determined with respect to the benchmark interest index used for funding, in order to represent dynamic risk management.

- 4.1.6 Given the dynamic risk management objective in the example, for the purposes of applying the PRA, it would not be consistent for the managed risk to be identified with respect to the pricing index on which the customer loans are based (the dashed curve), as that is not the risk that is being dynamically managed. Therefore, even though the pricing index for customer loans is a key driver when the loan portfolio was contracted, the impact of any subsequent changes in that rate is outside the scope of the bank's dynamic risk management and consequently is not considered for the purposes of applying the PRA. The relevant rate used for the purposes of the PRA under these circumstances is the funding index as represented by the funding benchmark interest index curve of the bank (the solid curve).
- 4.1.7 For example, assume a fixed interest rate customer loan with a nominal amount of CU100 and maturity of two years is priced from a pricing index and a credit spread is added. In the following example, the contractual lending rate at the deal date (31 December 20X0) is based on the pricing index (4.1 per cent) plus the counterparty credit spread (3 per cent), which equates to a coupon of 7.1 per cent. However, the funding sourced by the lender is based on another benchmark index (the funding index), which is at 4.5 per cent on the day that the customer loan is made.

	<b>Counterparty credit spread</b>	<b>Pricing index</b>	<b>Funding index</b>
Transaction date (31 Dec 20X0) <sup>(a)</sup>	3%	4.1%	<b>4.5%</b>
First revaluation date (31 Dec 20X1)	3.5%	4.5%	<b>5%</b>
Second revaluation date (31 Dec 20X2)	4%	5%	<b>5.4%</b>

(a) Also the date that the exposures are assumed to be included in the managed portfolio.

<b>Managed risk identified as</b>	<b>Pricing index</b>	<b>Funding index</b>
Contractual cash flows	7.1% <sup>(a)</sup>	7.1% <sup>(b)</sup>
Cash flows used for revaluation (numerator)	4.1%	4.5%
Discount rate on first revaluation (denominator)	4.5%	5%
Discount rate on second revaluation (denominator)	5%	5.4%

(a) = 4.1% + 3%  
(b) = 4.1% + 3%

- 4.1.8 This example illustrates that the choice of index will determine the cash flows that represent the managed risk for inclusion in the revaluation, as well as the discounting curve.
- 4.1.9 If the managed risk is the funding index, any changes in the counterparty credit risk and the differential between the pricing index used for pricing the customer loan and the funding index are not part of dynamic risk management and thus will not be reflected in the revaluation adjustment. The changes in the funding index (from 4.5–5.4 per cent) and how that impacts the value of the managed exposures (cash flows used in the numerator) are captured through the application of the PRA.
- 4.1.10 Revaluation adjustments on the transaction date and on the first revaluation date are determined as follows, using the numerator and the denominator that are derived from the funding index.

	<b>Revaluation CU</b>	<b>Revaluation adjustment CU</b>
Transaction date (31 Dec 20X0) and date included in managed portfolio	$4.5 \times (1.045)^{-1} + 104.5 \times (1.045)^{-2} = 100$	–
First revaluation date (31 Dec 20X1)	$104.5 \times (1.05)^{-1} = 99.52$	$99.52 - 100 = (0.48)$

- 4.1.11 When the cash flows of the managed portfolio are modelled and managed based on expected behaviour, such as for portfolios of prepayable mortgages or core demand deposits, the cash flows used in the numerator would need to include the effect of behaviouralisation to reflect dynamic risk management. For example, the cash flows representing the managed risk in a prepayable mortgage portfolio will be modelled and managed after considering the prepayment expectations. Therefore, a portfolio of mortgages with contractual lives of five years is unlikely to be represented in the managed portfolio with a 5-year contractual life, unless no prepayments were expected.
- 4.1.12 Paragraph 6.3.7(a) of IFRS 9 requires that any hedged risk component is 'separately identifiable and reliably measurable'. While this DP does not

consider this as a requirement in the context of applying the PRA, to proceed with the PRA it is likely that some eligibility criteria for the identification of the managed risks that will be revalued would need to be considered.

<b>Question 11—Revaluation of the managed exposures</b>	
(a)	Do you think that the revaluation calculations outlined in this Section provide a faithful representation of dynamic risk management? Why or why not?
(b)	When the dynamic risk management objective is to manage net interest income with respect to the funding curve of a bank, do you think that it is appropriate for the managed risk to be the funding rate? Why or why not? If not, what changes do you suggest, and why?



## 4.2 Role of transfer pricing

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- 4.2.1 In order to faithfully represent dynamic risk management, the revaluation of the net open risk positions should be determined consistently with how those positions are managed. When the dynamic risk management objective is to manage net interest income with respect to the funding rate, it is possible that the best representation of the managed risk is the funding index used by the bank.
- 4.2.2 One operational expedient would be to use the transfer pricing processes that are in place at banks in order to capture the managed risk in managed portfolios for the purposes of applying the PRA.
- 4.2.3 Internal funding or transfer pricing mechanisms usually operate in such a way that interest rate risk in the actual external facing business units is minimised and that risk is mainly or completely transferred to ALM. ALM determines an entity's interest rate risk position for inclusion in dynamic risk management based on the risk identified through transfer pricing transactions.
- 4.2.4 Some exposures may be internally funded on the basis of their expected cash flows, rather than contractual cash flows (for example, a prepayable mortgage portfolio). Accordingly, revaluing these transfer pricing transactions incorporates the behavioural risk profile embedded in the exposures, such as prepayable mortgages. This is also true for core demand deposits, because the behavioural element of the demand deposit portfolio is incorporated in the transfer pricing transaction, which is based on the deemed interest rate profile.
- 4.2.5 The dynamic nature of the managed portfolio means that the managed exposures in the portfolio are transacted over time and in varying interest rate environments. For a fixed interest rate exposure, it is necessary to capture the level of the managed risk at the time when the exposure first exposed the entity to the interest rate risk (the numerator in the revaluation calculation).<sup>23</sup> Interest on transfer pricing transactions is also based on the level of the managed risk at the time when an exposure first gave rise to the interest rate risk to be managed.

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<sup>23</sup> The managed risk is usually a benchmark funding rate.



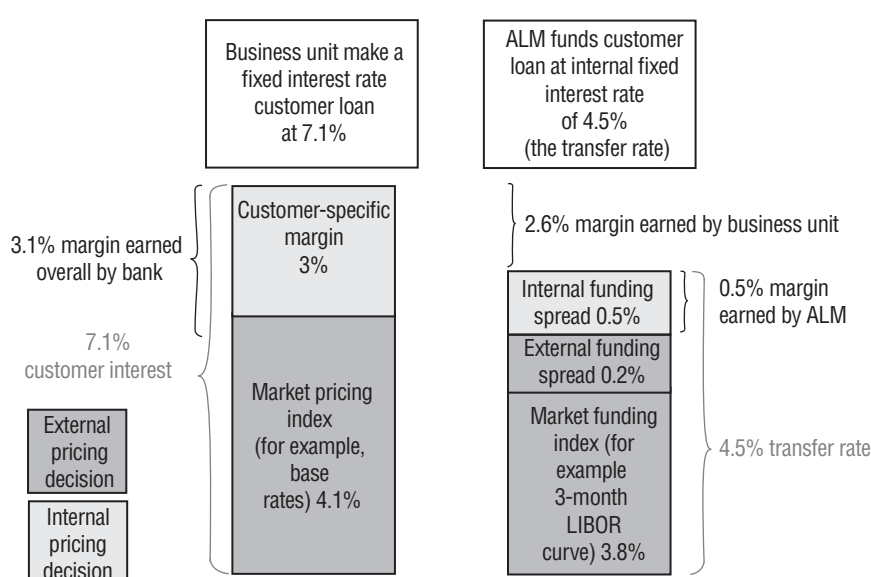
This is one of the reasons for considering transfer pricing transactions as proxies for capturing and revaluing the managed risk in the managed portfolios.

- 4.2.6 Transfer pricing transactions for variable interest rate exposures usually attract a variable (benchmark funding) rate, but without the customer margin. For this reason, transfer pricing transactions are also a good way to forecast and discount variable cash flows with respect to the managed risk in the managed portfolio, for the purposes of the PRA.
- 4.2.7 For example, assume that a bank raises funding through a programme of variable interest rate notes, which contractually re-fix to 3-month LIBOR, plus or minus a spread. These funds are placed with ALM using transfer price transactions, earning 3-month LIBOR. Isolation of the managed interest rate risk from the variable interest rate notes, and revaluing it, could be captured by forecasting and discounting the cash flows that are represented by the transfer pricing transactions.<sup>24</sup>
- 4.2.8 However, the extent to which a mechanism like transfer pricing can be used depends on whether existing transfer pricing transactions adequately represent the managed risk in the managed portfolios for the purposes of applying the PRA. The following paragraphs consider whether it would be appropriate to use a transfer pricing mechanism as a practical expedient for the purpose of identifying the numerator and the denominator when determining the revaluation adjustment.
- 4.2.9 Although many banks base the transfer price on benchmark interest rates, it is not uncommon for them to adjust a benchmark interest rate by a margin to calculate the funding rate for providing funds to or from business units. The additional margins can reflect internal or external pricing aspects.
- 4.2.10 Many banks apply an adjustment to a benchmark interest rate to reflect the cost of funds that the bank achieves externally.<sup>25</sup> For example, if a bank was on average charged LIBOR plus 0.2 per cent on its external funding, then that bank might incorporate the 0.2 per cent margin into the cost of funds charged to business units. Otherwise, uninformed lending decisions may be made by business units without full knowledge of their economic impact on the bank. In addition, internally calculated margins applied to benchmark indexes are often driven by a bank's liquidity or by other regulatory requirements. The inclusion of a margin on the transfer price is a means of sharing these costs across the businesses. Transfer pricing rates may also be adjusted to encourage particular behaviours in business units. For example, if a bank was concerned that additional funding would be difficult to obtain, it may apply an additional positive margin to the existing transfer price to encourage business units to take customer deposits. It is also common for banks to fund different assets and liabilities from different markets differently, resulting in potentially more than one funding index being used for a single managed portfolio.

24 When the external exposure is priced at the benchmark index less a spread, the sub-benchmark issue discussed in Section 3.10 would have to be considered. The revaluation of variable cash flow exposures will usually not result in significant revaluation adjustments.

25 Benchmark indexes often assume a credit risk for a group of banks, and thus lenders will adjust these indexes to reflect the credit risk of the specific bank that wants to borrow funds.

- 4.2.11 In addition, the risks reflected in transfer pricing may differ between banks, particularly with regard to interest rate pricing estimates and prepayment risk. This in turn would have an effect on the PRA if transfer pricing transactions are considered to be proxies for the managed risk in the managed portfolios. Instances may exist when, for essentially the same product, risks are transferred to ALM and managed differently by different banks because of different arrangements for transfer pricing transactions.
- 4.2.12 The key question is whether it is appropriate to use transfer pricing mechanisms, including all or some of the mentioned features, to represent the managed risk in the managed portfolios in order to determine the revaluation adjustment. This is illustrated in the following example.



- 4.2.13 This example is based on dynamic risk management that focuses on managing the net interest rate income with respect to the funding index. Under this dynamic risk management approach, the business unit has achieved a margin of 2.6 per cent, and ALM has earned a 0.5 per cent margin on the internal funding, on the assumption that the bank is actually funded at 3-month LIBOR plus a margin of 0.2 per cent.<sup>26</sup>
- 4.2.14 If the transfer price for the internal transaction was used as a proxy, then the revaluation would be calculated as follows: the net open risk position in the managed portfolio is represented by an internal loan with coupons of 4.5 per cent, and would be revalued with respect to changes in the transfer rate that would represent the managed risk. The initial calculation of the revaluation

<sup>26</sup> 2.6% = 7.1% - 4.5%

adjustment would be an implied par value (ie a loan with 4.5 per cent coupons being discounted at 4.5 per cent). Subsequently, the transfer rate at the time of revaluation would be used.

- 4.2.15 If the transfer rate increased to 5 per cent, the remaining outstanding 4.5 per cent coupons previously established (numerator in the present value calculation) would now be discounted at the current rate of 5 per cent (denominator in the present value calculation). This results in a revaluation lower than par because of the prevailing higher interest rate. If the loan was for CU100 million and had five years remaining, the revaluation would be CU98 million, resulting in a loss of CU2 million, as a result of the revaluation, that would be recognised in profit or loss.<sup>27</sup>
- 4.2.16 If the increase in the transfer rate was because of an increase in the market funding index, then it presents useful information because it quantifies through the application of the PRA the effect of the relative value of having locked in a loan at a different rate and how that impacts the risk position of the bank (because the cost of future external funding has changed). However, if the increase in the transfer rate is because of changes in the bank's external funding spread driven by the market's perception of the bank's own credit risk, then it is questionable whether applying the PRA using this rate has captured dynamic risk management as changes in the bank's own credit risk are typically not part of the dynamic risk management for interest rate risk that is being accounted for in the PRA.<sup>28</sup>
- 4.2.17 Furthermore, if the increase in the transfer rate was solely because of a management decision to increase the internal funding spread, then revaluing to reflect that aspect is unlikely to provide relevant information about the dynamic risk management activities. The cost of external funding has remained the same with no change in the economic position of the bank as a whole.
- 4.2.18 Assuming that transfer prices are accepted as a practical expedient for the purposes of calculating the basis for the revaluation under the PRA, one approach could be to permit the use of a transfer pricing rate that reflects only the market funding index (3-month LIBOR curve in the example in paragraph 4.2.12) and exclude any internal or own credit related spreads.
- 4.2.19 Another approach would be to permit the use of transfer prices without restriction (ie including any spreads) to identify the cash flows that are used for revaluation purposes (ie the numerator), but to require that the discount rates be derived only from the (unadjusted) relevant benchmark funding index. However, such a treatment would lead to a Day 1 revaluation effect (ie there would no longer be an initial revaluation with an implied par value). That difference would need to be either recognised in profit or loss immediately or amortised in some way, increasing operational complexity.
- 4.2.20 A third approach would be to use the full transfer prices (without restriction) to identify the cash flows that are used for the purposes of determining the

<sup>27</sup>  $CU98m = 4.5 \times (1.05)^{-1} + 4.5 \times (1.05)^{-2} + 4.5 \times (1.05)^{-3} + 4.5 \times (1.05)^{-4} + 104.5 \times (1.05)^{-5}$

<sup>28</sup> Fluctuations in the bank's own credit risk will be considered when measuring the fair value of risk management instruments, as required by IFRS 13.

revaluation adjustment, but to 'fix' all spreads other than the market funding index within the transfer price for the purposes of the discount rate at the original spread that was used in the pricing of the transfer pricing transaction.

- 4.2.21 The following table, using the example in paragraph 4.2.12, highlights the differences between the possible approaches:

	<b>Cash flows (numerator)</b>	<b>Initial discount rate (denominator)</b>	<b>Subsequent discount rate (denominator)</b>
Market funding index (excluding any other transfer pricing spreads)	3.8%	3.8%	Current market funding index
Cash flows based on full transfer pricing rate, discount rate restricted to market funding pricing <sup>(a)</sup>	4.5%	3.8%	Current market funding index
Cash flows based on full transfer pricing rate, discount rate restricted to current market funding index plus static other transfer pricing spreads	4.5%	4.5%	Current market funding index + 0.7%

(a) Will result in a Day 1 revaluation difference.

- 4.2.22 There are advantages and disadvantages for each of these approaches. In selecting the most appropriate approach, relevant considerations are the degree of subjectivity in the outcome, how faithfully economic events are reflected, whether dynamic risk management is appropriately reflected and the comparability across entities.

- 4.2.23 An additional question is the extent to which the risk transferred to ALM via transfer pricing is representative of the risk that exists in the managed portfolio. For example, the managed portfolio may be composed of sub-LIBOR financial instruments, but the managed risk transferred to ALM via the transfer pricing mechanism may be LIBOR. Some might believe that regardless of a bank's approach to dynamic risk management of a particular risk, such as interest rate risk, financial statements should reflect the actual interest rate risk inherent in a financial instrument. Under this view, when applying the PRA, transfer pricing transactions should only be permitted as proxies for the risk from managed exposures if those transfer pricing transactions provide a close enough representation of the actual risk. If this is not the case then determining the revaluation adjustment based on transfer pricing transactions would not result in relevant information about an entity's dynamic risk management activity. The consequence of this view is that the interest rate risk that actually arises from the managed exposures must be the starting point for accounting for dynamic risk management activity, regardless of how it has been managed.

- 4.2.24 A possible practical expedient would be to allow risks represented in transfer pricing to be used as a proxy for the risk resulting from managed exposures, if they were deemed to be close enough to the risks in the managed exposure. However, what is meant by ‘close enough’ would need to be determined and could lead to ‘bright lines’ and increase operational complexity.

### 4.3 Ongoing linkage

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- 4.3.1 The discussion in Section 4.2 focuses on whether transfer pricing transactions capture the managed risk in the managed portfolio. However, there is also the question of whether transfer pricing transactions would continue to be a good proxy for the managed risk in the managed portfolio over time, in order to be used in the application of the PRA.
- 4.3.2 For example, assume a business unit lends CU500 million to a portfolio of retail customers on a 5-year fixed interest rate basis. It expects that CU200 million of the loans will be repaid at the end of two years. Consequently, the business unit receives CU300 million of funding for five years and CU200 million of funding for two years through fixed-rate transfer pricing transactions. The 2-year and 5-year internal fixed interest rate loans are included in ALM’s managed portfolio and the resulting net open risk positions are managed accordingly. At the end of the second year CU250 million of loans have been prepaid, ie CU50 million more than expected. CU50 million of the original 5-year funding is therefore no longer required by the business unit and should be repaid. The subsequent actions that the business unit is permitted to take could have a significant impact on the accounting for the dynamic risk management activities if the transfer pricing transaction is used to represent the managed risk in the managed portfolios when applying the PRA. Some possible outcomes in this fact pattern are:
- (a) if the business unit applies the internal funding to incremental funding needs for new business, the business unit (and the bank) will either suffer or benefit from any impact on the net margin from funding new business at a historic rate. It is possible that ALM will be unaware of the change in the cash flows arising from the prepayment of CU50 million of external exposure and no immediate change will be made to the managed portfolio as a result of the prepayment. Consequently, if transfer pricing is considered as a proxy when applying the PRA, under these circumstances no changes to the revaluation adjustment will occur as a result of the prepayment and consequently would fail to represent dynamic risk management.
  - (b) if the business unit enters into an additional offsetting transfer pricing transaction as an overlay at prevailing market rates to reduce its net funding from ALM, this would affect ALM’s managed net open risk position, but the difference between the original rate and the rate on the offsetting transaction will affect the net margin over time, with no immediate impact on the revaluation adjustment in profit or loss.

- (c) if the business unit repays the original internal funding, it creates a change in the managed portfolio and consequently has an impact on the revaluation adjustment when applying the PRA, reflecting a reduction in the residual 3-year interest rate risk exposures of CU50 million, thereby capturing dynamic risk management. ALM will update its net open risk position and potentially take action if required.
- 4.3.3 Consequently, different actions taken by the business unit will impact how dynamic risk management is represented on application of the PRA, if transfer pricing transactions are considered to be an appropriate operational expedient.
- 4.3.4 The use of transfer pricing transactions for the purposes of representing the managed risk in the managed portfolios is likely to have significant operational advantages. However, it is important to consider whether some or all transfer pricing transactions appropriately represent the managed risk in the managed portfolios to enable it to be used for the purposes of applying the PRA.

<b>Question 12—Transfer pricing transactions</b>	
(a)	Do you think that transfer pricing transactions would provide a good representation of the managed risk in the managed portfolio for the purposes of applying the PRA? To what extent do you think that the risk transferred to ALM via transfer pricing is representative of the risk that exists in the managed portfolio (see paragraphs 4.2.23–4.2.24)?
(b)	If the managed risk is a funding rate and is represented via transfer pricing transactions, which of the approaches discussed in paragraph 4.2.21 do you think provides the most faithful representation of dynamic risk management? If you consider none of the approaches to be appropriate, what alternatives do you suggest? In your answer please consider both representational faithfulness and operational feasibility.
(c)	Do you think restrictions are required on the eligibility of the indexes and spreads that can be used in transfer pricing as a basis for applying the PRA? Why or why not? If not, what changes do you recommend, and why?
(d)	If transfer pricing were to be used as a practical expedient, how would you resolve the issues identified in paragraphs 4.3.1–4.3.4 concerning ongoing linkage?



#### 4.4 Selection of funding index

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- 4.4.1 It is not always possible to identify a 'known' funding source for particular exposures that will then provide a basis for determining the transfer price or

funding rate.<sup>29</sup> Banks raise funding from a variety of sources and manage the resulting interest rate risk from assets and liabilities on a portfolio basis, without necessarily matching up particular assets as being funded by particular liabilities. Consequently, for all the exposures managed by ALM for the bank as a whole, the funding index that would be most appropriate for ALM to consider when managing the interest rate risk is not normally a matter of fact. For example, for a portfolio of mortgages, a bank may not know whether the portfolio is funded with deposits fixing to 1-month, 3-month, other market rates or a combination of all three (a blended rate).

- 4.4.2 In these circumstances it is not uncommon for ALM to make an assessment of a portfolio or a bank's usual funding index. For example, the bank may expect that most of its funding is from liabilities fixing to 3-month LIBOR, and so the funding index for all exposures, including for example its mortgage portfolio, is determined with respect to the 3-month LIBOR curve.
- 4.4.3 Another approach may be to assign the funding rate to particular portfolios via transfer pricing transactions. For example, ALM may determine that the funding index for all of the commercial fixed interest rate businesses should be priced from the 1-month LIBOR curve, whereas the funding index for all of the fixed interest rate retail lending should be priced from the 3-month LIBOR curve.
- 4.4.4 Mechanically, the PRA could accommodate more than one funding index, assuming that the revaluation adjustments can be derived from different benchmark index curves depending on the different managed portfolios. Although the exact funding source cannot usually be identified, incorporating a funding index within the PRA that does not faithfully represent the actual funding index that a bank has incurred and that it dynamically manages will not provide useful information on the bank's dynamic risk management processes. Because of this, the DP includes a question about whether restrictions on the choice of the funding index for the purposes of applying the PRA would be necessary or appropriate.
- 4.4.5 The discussion so far on the use of funding indexes by banks has generally been with respect to managed assets. This DP assumes that in the case of managed liabilities the appropriate funding index would be the benchmark interest rate that a bank used for pricing those liabilities.

<b>Question 13—Selection of funding index</b>	
(a)	Do you think that it is acceptable to identify a single funding index for all managed portfolios if funding is based on more than one funding index? Why or why not? If yes, please explain the circumstances under which this would be appropriate.
(b)	Do you think that criteria for selecting a suitable funding index or indexes are necessary? Why or why not? If yes, what would those criteria be, and why?

<sup>29</sup> For example, the assumption would mean that for each external lending (asset) portfolio, the bank can identify the specific external liabilities and associated market interest rates that fund those specific lending activities.

## 4.5 Pricing index

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- 4.5.1 There may be circumstances in which a bank's dynamic risk management objective is to manage its net interest income based on a pricing index (ie the basis for determining pricing when lending to customers) and not a funding index. When the exposure is managed based on the pricing index, the pricing index selected would be relevant for the purposes of applying the PRA.
- 4.5.2 If a pricing index is identified as the managed risk, then to reflect dynamic risk management the determination of the numerator and the denominator in the calculation of the portfolio revaluation adjustment would need to be with regard to the pricing index. Risks other than the pricing index (for example, credit risk) would be excluded from the PRA, consistent with the approach when the managed risk is a funding index.
- 4.5.3 For some dynamic risk management strategies the funding and pricing index (or their equivalent) will be the same. For example, some power entities manage their exposures to changes in the net margin from gas purchases and sales on the same market pricing. Likewise banks' dynamic risk management of fixed-rate money market transactions may be based on the same price indexes.

<b>Question 14—Pricing index</b>	
(a)	Please provide one or more example(s) of dynamic risk management undertaken for portfolios with respect to a pricing index.
(b)	How is the pricing index determined for these portfolios? Do you think that this pricing index would be an appropriate basis for applying the PRA if used in dynamic risk management? Why or why not? If not, what criteria should be required? Please explain your reasons.
(c)	Do you think that the application of the PRA would provide useful information about these dynamic risk management activities when the pricing index is used in dynamic risk management? Why or why not?



## Section 5 Scope

### 5.1 Introduction

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- 5.1.1 This Section discusses the possible scope of the application of the PRA. The scope has significant implications for the information provided to users of financial statements and how operationally feasible the application of the PRA would be for an entity.
- 5.1.2 Various alternatives can be considered to reflect dynamic risk management faithfully in the financial statements. One approach is to consider a model that captures all elements of dynamic risk management activity, ie risk identification, analysis and mitigation through hedging. Under this approach the presence of any one of these elements would result in an entity applying the PRA, with the objective being to faithfully represent such activities in the financial statements. For example, in banks, risk managers use sensitivity analysis to capture the sensitivity of exposures to changes in interest rates, thereby allowing management to judge the entity's net interest risk exposure. This forms the basis of dynamic risk management decisions regarding the need, timing and extent of hedging or risk mitigation activities. The approach discussed in this paragraph aims to represent the impact of all net open risk positions that an entity has at a point in time in the financial statements: both net open risk positions that it has identified, analysed and not hedged and those that it has identified, analysed and hedged using risk management instruments. The advantages and disadvantages of such a scope of application are discussed in Section 5.2.
- 5.1.3 The other alternative to consider, again using the example of dynamic interest rate risk management, is an approach that captures dynamic risk management only when all three elements of dynamic risk management are undertaken by an entity, ie risk identification, analysis and mitigation through hedging. Consequently, assuming risk identification and analysis has been undertaken, this scope alternative would only apply to those circumstances in which an entity has undertaken risk mitigation through hedging. The advantages and disadvantages of such a scope of application are discussed in Section 5.2.
- 5.1.4 The issues and challenges presented under these scope alternatives are often interrelated. In addition, the question of whether the application of the PRA should be mandatory or optional under both scope alternatives and the interaction of the PRA with the general hedge accounting requirements in IFRS would need to be addressed.
- 5.1.5 This DP also considers whether and how each of these scope alternatives meets the objective of representing dynamic risk management more faithfully by aligning dynamic risk management and accounting thereby resulting in a reduction in operational complexity.

## 5.2 Views on scope alternatives

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### A focus on dynamic risk management

- 5.2.1 Dynamic risk management focuses on managed portfolios and addresses the managed risk by using a number of tools, including, but not limited to, risk mitigation through hedging. Accordingly, some are of the view that the PRA should be applied to all managed portfolios. Considering the example of a bank, the scope of the application of the PRA could be the entire banking book if the bank manages the interest rate risk arising from the entire banking book dynamically. Those who support this scope alternative argue that it would enable users of a bank's financial statements to understand its profits and corresponding risks by profit source, and to understand the implications of both hedging and maintaining net open risk positions unhedged. This perspective is consistent with a general understanding that banks tend to manage all net open risk positions in a comprehensive and integrated manner.
- 5.2.2 Application of the PRA to all managed portfolios would provide a complete picture of the net open interest rate risk position(s) together with the risk management instrument(s). For example, a bank has two business lines (retail and corporate banking) but it only dynamically manages interest rate exposures in the retail banking business. In this case, if the scope of application is a focus on dynamic risk management, all interest rate exposures in the retail banking business (which could be composed of a number of portfolios and sub-portfolios) will be included within the scope of the PRA, regardless of the extent to which any net open risk positions have been hedged. The interest rate exposures arising from corporate banking would however not be included as they are not dynamically managed by the bank.
- 5.2.3 The financial statements would provide a complete picture of an entity's managed net open risk position(s) and risk management instrument(s), because all the managed exposures would be revalued, including those that are hedged and those that are not. Unhedged exposures would be revalued with no offsetting effect from risk management instrument(s) leading to potential volatility in profit or loss, consistent with the economic position.

### Advantages and disadvantages of a scope focused on dynamic risk management

#### *Advantages*

- 5.2.4 Banks earn net interest income that is the difference between the yield on assets (for example, loans) and the cost of funding (for example, deposits). An advantage of the PRA is that it would enable users of financial statements to understand the profits and the corresponding risks by profit source. The PRA provides information about the managed risks and all risk management activities. Some argue that, if this information is useful for an entity when managing its risks, then it should be equally useful for investors in their decision-making processes. If the aim is to develop a new model to account for dynamic risk management, arguably, consistency between the scope of the accounting and dynamic risk management is essential.

- 5.2.5 This scope alternative also addresses the concern of some who are of the view that currently financial statements fail to provide important information on risk management activities. One of the reasons given is that the current patchwork application of hedge accounting requirements make it difficult for users of financial statements to understand reported results (for example, volatility in profit or loss). This is partly because the current hedge accounting requirements do not provide a complete picture of an entity's exposure to a particular managed risk, such as interest rate risk, as there is no requirement to reflect net open risk positions in the accounting. Also, since hedge accounting is often used today to address volatility in profit or loss rather than to represent dynamic risk management per se, it may only reflect some but not all dynamic risk management.
- 5.2.6 There are also operational advantages to this scope alternative as there is a greater opportunity to use existing risk management data for accounting purposes.

#### *Disadvantages*

- 5.2.7 For those focused on actual hedging activity, information on net open risk positions that have not been hedged may not provide useful information regarding dynamic risk management. In particular, those with this view argue that the volatility arising from the revaluation of net open risk positions that have been left unhedged is not relevant. Consequently, some may believe that consideration of all net open risk positions may not result in useful information for decision-making purposes. In addition, comparability between entities that dynamically manage interest rate risk and those that do not becomes an issue. For example, profit or loss for entities with an amortised cost portfolio for which dynamic risk management is not undertaken would not reflect volatility from open positions. In contrast, those entities that did undertake dynamic risk management but not risk mitigation through hedging would report a more volatile profit or loss.
- 5.2.8 Another disadvantage is that there could be circumstances in which the costs outweigh the benefits (ie the effect of applying the PRA in the financial statements may be so small that the cost of the required systems changes may not be justified). An example would be for a bank that dynamically manages the interest rate risk from a portfolio made up predominantly of variable interest rate exposures, with minimal fixed-rate exposures. If the PRA were to be applied to the whole managed portfolio, then the effect of revaluing variable interest rate exposures may be too small to justify investments in systems to apply the PRA. Dynamic risk management could encompass strategies to reduce, maintain or increase a portfolio's sensitivity to changes in market interest rates in order to achieve the targeted yield profile for the portfolio. Some might argue that a single approach, such as the PRA, even if applied with a focus on dynamic risk management, cannot portray the different objectives of all forms of dynamic risk management.

#### **A focus on risk mitigation**

- 5.2.9 This approach captures dynamic risk management only when all three elements of dynamic risk management are undertaken by an entity, ie risk identification,

analysis and mitigation through hedging. Consequently, this scope alternative would only apply to those circumstances in which an entity has undertaken risk mitigation through hedging.

- 5.2.10 Supporters of this scope alternative believe that applying the PRA to unhedged net open risk positions does not provide useful information about dynamic risk management activities. In their view, a decision not to hedge net open risk positions should not lead to volatility in profit or loss.
- 5.2.11 In accordance with IFRS 9, financial assets and financial liabilities are accounted for at amortised cost when the relevant classification criteria are met. When financial instruments are measured at amortised cost, mismatches in repricing dates between assets and liabilities do not create immediate volatility in profit or loss.<sup>30</sup> However, if the PRA is applied to all (hedged and unhedged) net open risk positions, this leads to immediate volatility in profit or loss. Those supporting the view that the scope of application of the PRA should be a focus on risk mitigation note that the underlying economics of entities that dynamically manage portfolios but do not hedge, and entities that do not dynamically manage portfolios and do not hedge, should be similar. They note that only the act of hedging creates an economic difference between the entities' exposures to interest rate risk. Consequently, those holding these views believe that the scope should be restricted to a focus on risk mitigation.
- 5.2.12 The IASB considered two approaches within the scope of a focus on risk mitigation: the sub-portfolio approach and the proportional approach.

#### **Sub-portfolio approach**

- 5.2.13 Under this approach the scope of the application of the PRA would be limited to the sub-portfolios that are managed dynamically for which risk mitigation or hedging activities have been undertaken. For example, a bank with three sub-portfolios of fixed interest rate exposures enters into pay-fixed receive-variable swaps as part of its dynamic risk management strategy. If the bank can clearly identify a sub-portfolio that is hedged, the PRA would only apply to that sub-portfolio.
- 5.2.14 The IASB however noted that this example might not be representative of how banks manage interest rate risk. As previously discussed, under dynamic risk management, it is more likely that hedging decisions will be taken on the basis of all managed portfolios and not allocated to specific sub-portfolios. Therefore, a question arises as to whether the application of the PRA to specific sub-portfolios will provide an artificial representation of dynamic risk management that will result in information that is therefore not useful to users of financial statements.

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<sup>30</sup> When no hedging transactions are undertaken, fluctuations in net interest income due to net open interest rate risk positions would be shown in profit or loss through net interest income over time as the effects of the net open risk positions unwind. Some have argued that this is a faithful representation of the outcome arising from their dynamic risk management activities.

### **Proportional approach**

- 5.2.15 A hedged position is determined as a proportion of the dynamically managed portfolio. For example, if a bank identifies that it has hedged 80 per cent of its interest rate risk exposure in notional terms in a managed portfolio, then the PRA would only be applied to that proportion to reflect the hedging activity from dynamic risk management.
- 5.2.16 The IASB however noted once again that this example might not be representative of how banks manage interest rate risk. Banks rarely hedge a fixed proportion of a managed portfolio and that proportion is likely to change from period to period. Therefore, a question arises as to whether the application of the PRA to a proportion of a managed portfolio will provide an artificial representation of dynamic risk management that will not result in information that is useful to users of financial statements.

### **Advantages and disadvantages of a focus on risk mitigation**

#### *Advantages*

- 5.2.17 This scope alternative appeals to those who believe that the accounting provides more useful information when it reflects how successful an entity has been in meeting its dynamic risk management objectives.
- 5.2.18 In addition, because the scope alternatives for the PRA and for hedge accounting in IFRS 9 and IAS 39 would be similar, the interaction between the two approaches would be easier to understand and explain.
- 5.2.19 Some also believe that this scope alternative enables a pragmatic exclusion of managed portfolios for which the additional information provided by applying the PRA is limited, such as portfolios made up predominantly of variable interest rate exposures.

#### *Disadvantages*

- 5.2.20 Under this approach, information about the effects of the decisions not to hedge would no longer be portrayed.
- 5.2.21 Some are concerned that this scope alternative would further confuse the understanding of dynamic risk management. This is because a piecemeal application of the PRA may not be aligned with the dynamic risk management view. Banks often manage multiple sub-portfolios together with risk management instruments in a comprehensive and integrated manner. In this scenario, deciding which sub-portfolio to select for the purposes of applying the PRA would potentially be arbitrary, because the ultimate risk management focus is not on the sub-portfolios selected but on the total risk being managed. A different choice of sub-portfolio may have a significant impact on the accounting results. Some may also be concerned about the possibility that the PRA could be used to achieve specific accounting results.
- 5.2.22 Others note that, since dynamic risk management is usually updated continuously, practical issues would arise when applying, for example, the sub-portfolio approach. This is because the selected sub-portfolios may change frequently, requiring the PRA to accommodate a 'switch on/switch off'

mechanism. Similarly, under the proportional approach, the hedged proportion could also change frequently. The overall hedged proportion is likely to change over time and, additionally, it may not be desirable for all net open risk positions to be hedged to the same proportion at any point in time. Operational complexity would increase.

- 5.2.23 Others are concerned that if an option were available to choose specific portfolios for the purposes of applying the PRA, entities would use the PRA only for open portfolios for which the hedging activity is difficult to accommodate within the existing hedge accounting requirements in IFRS 9 and IAS 39. This would fail to provide information on dynamic risk management in a comprehensive manner.
- 5.2.24 There could also be an argument that a choice between the hedge accounting requirements in IFRS 9 and IAS 39 and the PRA combined with a choice to use neither simply means that an entity is equipped with a more enriched 'toolkit' to reduce the volatility reported in profit or loss. This could appeal to those who view hedge accounting and the PRA as a means to manage volatility in profit or loss arising from accounting mismatches. However, there is a possibility that such an approach aggravates the existing challenges resulting from patchwork hedge accounting requirements. An entity's decision on which approach to use could be driven by a goal to reduce volatility in profit or loss rather than to more faithfully reflect the underlying economics.
- 5.2.25 In general, an expected advantage of the PRA relative to hedge accounting would be its operational feasibility once it has been implemented.<sup>31</sup> However, when considering the scope for application of the PRA focused on risk mitigation, it is possible that the practical burdens associated with the current hedge accounting requirements will remain because of the need to distinguish between decisions to hedge and not to hedge.

#### **Comparison of a scope focused on dynamic risk management and a scope focused on risk mitigation**

- 5.2.26 The following paragraphs set out an example that highlights how the accounting results would differ depending on the scope.
- 5.2.27 A bank has three fixed interest rate loan sub-portfolios (A1, A2 and A3), all of which are dynamically managed. The net open risk positions in each of these sub-portfolios amounts to CU20. All three sub-portfolios are funded with variable interest rate deposits. The risk managers responsible for managing the interest rate risk in A1 and A2 entered into pay-fixed receive-variable IRSs (Y1 and Y2 of CU20 each) with the intention of eliminating interest rate risk exposures in these two sub-portfolios. Y1 and Y2 correspond to A1 and A2 respectively. The risk manager responsible for A3 decided not to hedge, leaving the net interest rate risk position in A3 open. If the scope of application of the PRA is a focus on dynamic risk management, A1, A2 and A3 (and Y1 and Y2) would all need to be accounted for using the PRA. On application of the PRA, the

<sup>31</sup> Entities would face implementation challenges when initially implementing the PRA even though there is an expectation that existing information systems that are currently used only for dynamic risk management purposes would also be useful for accounting purposes when applying the PRA.

revaluation of the managed sub-portfolios for the interest rate risk would include all of them, both the portfolios whose net open risk positions have been hedged (A1 and A2) and the ones whose net open risk positions have been left unhedged (A3).

- 5.2.28 In contrast, if the scope of the application of the PRA was based on risk mitigation, an entity would apply the PRA either to the two portfolios (A1 and A2) that are hedged (the sub-portfolio approach), or to 66.6 per cent of its total portfolio (the proportional approach). Using either of these two approaches, the revaluation adjustment would be limited to the exposures that are hedged and, consequently, any volatility in profit or loss would only reflect the ineffectiveness of the hedges of A1 and A2 or 66.6 per cent of the total portfolio. A3 or 33.3 per cent of the unhedged proportion of the total portfolio that is unhedged would not be revalued.

<b>Question 15—Scope</b>	
(a)	Do you think that the PRA should be applied to all managed portfolios included in an entity's dynamic risk management (ie a scope focused on dynamic risk management) or should it be restricted to circumstances in which an entity has undertaken risk mitigation through hedging (ie a scope focused on risk mitigation)? Why or why not? If you do not agree with either of these alternatives, what do you suggest, and why?
(b)	Please provide comments on the usefulness of the information that would result from the application of the PRA under each scope alternative. Do you think that a combination of the PRA limited to risk mitigation and the hedge accounting requirements in IFRS 9 would provide a faithful representation of dynamic risk management? Why or why not?
(c)	Please provide comments on the operational feasibility of applying the PRA for each of the scope alternatives. In the case of a scope focused on risk mitigation, how could the need for frequent changes to the identified hedged sub-portfolio and/or proportion be accommodated?
(d)	Would the answers provided in questions (a)–(c) change when considering risks other than interest rate risk (for example, commodity price risk, FX risk)? If yes, how would those answers change, and why? If not, why not?

### **5.3 Should the application of the PRA be mandatory or optional?**

- 5.3.1 An additional consideration is whether the PRA should be mandatory or optional. The scope alternatives (a focus on dynamic risk management or a focus on risk mitigation) have an effect on this question.

5.3.2 In the absence of a mandatory requirement, an entity engaging in dynamic risk management could elect any one of four accounting alternatives, as set out in the following table:

Apply neither hedge accounting requirements in accordance with IFRS 9 and IAS 39 nor the PRA	Accounting for individual items without regard to risk management activity (ie an entity would simply follow the classification and measurement requirements in IFRS 9).
Apply only hedge accounting requirements in accordance with IFRS 9 and IAS 39	Accounting information reflects the information produced through hedge designations under IFRS 9 and IAS 39.
Apply only the PRA	Accounting information reflects portfolio revaluation by risk for some or all exposures that are dynamically risk managed.
Apply hedge accounting requirements in accordance with IFRS 9 and IAS 39 and the PRA if the scope of application is a focus on risk mitigation	Accounting information reflects portfolio revaluation by risk for some exposures that are dynamically risk managed to which the PRA is applied, and also information that is produced through hedge designations under IFRS 9 and IAS 39 for other exposures.

5.3.3 Even when entities consider that one of these alternatives best reflects their activities, it is possible that, given a free choice, many would choose the alternative that presents the least volatility in profit or loss. Comparability is also reduced when options are available.

5.3.4 Consequently, some would argue that the application of the PRA should be mandatory. However, this involves the following practical and conceptual difficulties:

- (a) Interaction with hedge accounting requirements: mandatory application of the PRA with a focus on dynamic risk management raises questions regarding the interaction of the PRA with the hedge accounting requirements in IFRS 9 and IAS 39. Assume that a bank has fixed interest rate assets and variable interest rate liabilities. It manages the interest rate risk dynamically using a grid point sensitivity approach. If the application of the PRA with a focus on dynamic risk management were mandatory, the alternative of applying the cash flow hedge accounting requirements under IFRS 9 and IAS 39 would no longer be available to the bank. However, if the application of the PRA was optional and the scope of the PRA was a focus on risk mitigation, then the issue would not arise. However, this also raises the issue that such choice will further add to, rather than reduce, the patchwork of hedge accounting requirements and will also fail to reduce operational complexity.
- (b) Articulating the scope: for the PRA to be mandatory, dynamic risk management would need to be precisely defined. This could prove difficult because of the diversity in dynamic risk management approaches even among entities within the same industry.



- 5.3.5 Under the scope alternative a focus on risk mitigation, an entity's profit or loss would show 'how successful the hedging activities are'. However, even if the application of this scope alternative were mandatory, the choice of which sub-portfolio(s) or proportions would be included allows an element of choice to be built into the PRA. In addition, the PRA would then have to consider the various aspects of designation and de-designation as sub-portfolios or proportions change over time.
- 5.3.6 Optional application would appeal to those who view both hedge accounting and the PRA as tools to primarily manage volatility in profit or loss. In addition, those who believe that the potential operational complexity of the PRA is only justifiable in some circumstances are expected to support optional application.
- 5.3.7 While optional application of the PRA addresses some of the issues that arise with mandatory application, it creates some issues of its own. For both scope alternatives, when the application of the PRA is optional, additional guidance regarding when and how an entity can start and/or stop the application of the PRA would need to be considered. In addition, optional application of the PRA could also bring in amortisation and tracking requirements, which could compromise operational simplicity.

<b>Question 16—Mandatory or optional application of the PRA</b>	
(a)	Do you think that the application of the PRA should be mandatory if the scope of application of the PRA were focused on dynamic risk management? Why or why not?
(b)	Do you think that the application of the PRA should be mandatory if the scope of the application of the PRA were focused on risk mitigation? Why or why not?

## 5.4 Other eligibility criteria

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- 5.4.1 This DP does not consider specific eligibility criteria for the application of the PRA other than the requirement that the risk be managed dynamically. There are no requirements discussed for effectiveness tests beyond existing dynamic risk management processes. However, given the scope alternatives, additional requirements might be needed depending on which alternative is selected.
- 5.4.2 For example, if on one hand the PRA is mandatory and the scope is a focus on dynamic risk management then it is possible that no additional eligibility criterion is required for the application of the PRA other than for clarity on what dynamic risk management is. Alternatively, if the scope of the application is a focus on risk mitigation, this would introduce an additional factor and it is possible that additional criteria would need to be developed regarding what is considered risk mitigation or hedging under dynamic risk management. In addition, as mentioned previously, if the application of the PRA were optional, criteria regarding stopping and starting the application of the PRA, including the accounting mechanics, would need to be determined.

**Question 17—Other eligibility criteria**

- (a) Do you think that if the scope of the application of the PRA were focused on dynamic risk management, then no additional criterion would be required to qualify for applying the PRA? Why or why not?
- (i) Would your answer change depending on whether the application of the PRA was mandatory or not? Please explain your reasons.
  - (ii) If the application of the PRA were optional, but with a focus on dynamic risk management, what criteria regarding starting and stopping the application of the PRA would you propose? Please explain your reasons.
- (b) Do you think that if the scope of the application of the PRA were to be focused on risk mitigation, additional eligibility criteria would be needed regarding what is considered as risk mitigation through hedging under dynamic risk management? Why or why not? If your answer is yes, please explain what eligibility criteria you would suggest and, why.
- (i) Would your answer change depending on whether the application of the PRA was mandatory or not? Please explain your reasons.
  - (ii) If the application of the PRA were optional, but with a focus on risk mitigation, what criteria regarding starting and stopping the application of the PRA would you propose? Please explain your reasons.

## Section 6 Presentation and disclosures

### 6.1 Presentation

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- 6.1.1 For the purposes of this DP the IASB has considered presentation alternatives in the statement of financial position and the statement of comprehensive income only in the context of dynamic interest rate risk management. The IASB will consider additional presentation alternatives as part of its standard-setting process for other risks on receiving feedback from interested parties.
- 6.1.2 When applying the PRA, exposures included within the managed portfolio would be recognised in the statement of financial position in accordance with IFRS 9. This DP considers three alternatives for the presentation of the revaluation adjustments arising from the PRA in the statement of financial position. The main difference between the alternatives considered is whether the revaluation adjustments would be presented on a net or a gross basis. The presentation alternatives are equally applicable under the different scope alternatives considered in this DP: a focus on dynamic risk management and a focus on risk mitigation.
- 6.1.3 This DP also considers two alternatives for the presentation of the revaluation adjustments in the statement of comprehensive income. The aim of both alternatives is to reflect an entity's dynamic risk management objective (ie altering the profile of the net interest income with respect to the managed risk) in the statement of comprehensive income. In addition, the net revaluation effect (ie net changes arising from the revaluation of the managed portfolio and the fair value changes arising from risk management instruments) would be presented in a separate profit or loss line in the statement of comprehensive income.

#### **Treatment in the statement of financial position**

- 6.1.4 This DP addresses three alternatives for the presentation of the revaluation adjustments arising from the PRA in the statement of financial position. The alternatives are:
- (a) line-by-line gross up—the carrying amounts of the exposures included within the managed portfolio would be adjusted to reflect the revaluation for the managed risk;
  - (b) separate lines for aggregate adjustments to assets and liabilities—separate line items would be presented for both the revaluation adjustments for the revalued exposures that are assets and those that are liabilities; and
  - (c) single net line item—the net revaluation adjustment for all exposures subject to the PRA would be presented in a single line item in the statement of financial position.
- 6.1.5 The example in the following table illustrates the presentation alternatives in the statement of financial position.

DR/(CR)	Presentation alternatives in the statement of financial position					
	Amortised cost	Revaluation adjustment	Fair value	Line-by-line gross up	Aggregate adjustment	Single net line item
<b>Assets</b>						
Retail loans	1,000	11		1,011	1,000	1,000
Commercial loans	750	30		780	750	750
Debt securities	500	(20)		480	500	500
Dynamic risk management revaluation					21	
<b>Derivatives</b>			25	25	25	25
<b>Liabilities</b>						
Deposits	(400)	5		(395)	(400)	(400)
Issued debt securities	(1,500)	(40)		(1,540)	(1,500)	(1,500)
Firm commitments		(15)		(15)		
Dynamic risk management revaluation					(50)	(29)
		(29)	25			
<b>Profit or loss from dynamic risk management activities</b>		4				

- 6.1.6 The following paragraphs discuss whether these presentation alternatives would provide useful information about an entity's dynamic risk management activity.
- 6.1.7 A line-by-line gross up presentation of the revaluation adjustment in the statement of financial position would quantify the impact of dynamic risk management on the exposures and would provide useful information about the effect of the managed risk on the managed portfolio. However, presenting the revaluation adjustment in the statement of financial position on a line-by-line basis could be viewed as inconsistent with the dynamic risk management focus on the net position. In addition, the volatility in the line-by-line presentation due to changes in interest rates may not provide useful information about a bank's ability to generate net interest income from its underlying assets and liabilities. Reflecting revaluation on a line-by-line basis would also be the most operationally burdensome approach. The aggregate adjustment and single net line item presentation alternatives may be more consistent with the dynamic risk management perspective.
- 6.1.8 Not all managed exposures would be recognised as financial assets and financial liabilities, for example, unrecognised firm commitments. Furthermore, depending on the exposures that are ultimately considered for inclusion in the PRA, recognition of the revaluation of other exposures such as pipeline transactions and EMB in the statement of financial position may also need to be considered.

- 6.1.9 Although firm commitments are not recognised, they would meet the definition of an asset or a liability, and hence there is no conceptual difficulty recognising the associated revaluation adjustment in the statement of financial position. The revaluation of firm commitments could therefore be presented in a new line item in the statement of financial position. However, it is more difficult to argue that a revaluation adjustment for either pipeline transactions or EMB should be recognised as an asset or a liability (see Sections A1–A2).
- 6.1.10 The accounting for risk management instruments would be unchanged. They would continue to be measured at fair value in the statement of financial position.

### **Treatment of the effect of risks other than the managed risk in the statement of comprehensive income**

- 6.1.11 As previously mentioned, the PRA revalues the managed exposures only for the managed risk after an entity applies the relevant IFRS classification and measurement requirements. For example, in the case of a portfolio of loans managed with respect to changes in the benchmark interest rate, the PRA would only revalue the loans for the benchmark interest rate. Any residual components of the loans, such as the credit margin, would be recognised as interest revenue in accordance with applicable IFRSs.

### **Treatment of risk positions and risk management instruments in the statement of comprehensive income**

- 6.1.12 The objective of risk managers within a bank is often to alter the bank's exposure profile to interest rate risk to achieve a targeted effect on the net interest income. Within a managed portfolio, this dynamic risk management objective is usually achieved by focusing on the risk that arises from fixed interest rate exposures, because of, for example, movements in benchmark interest rates. An objective of the PRA is for the presentation of net interest income to provide this perspective of dynamic risk management to users of financial statements. In addition, providing information on the effect of the revaluation for the managed risk would reflect an entity's exposures and how the entity manages those exposures. This would also be a means to capture the effect of dynamic risk management activity on future net interest income.
- 6.1.13 This DP considers two presentation alternatives to reflect this dynamic risk management focus in the statement of comprehensive income. Both alternatives would present net interest income adjusted by the effect of dynamic risk management and the net revaluation effect arising from managed portfolios and risk management instruments. The two alternatives are:
- (a) actual net interest income presentation—actual interest revenue and interest expense would be presented along with an additional interest line to present net interest income from risk management instruments. The revaluation effect from dynamic risk management activities, also presented in a separate line item, would provide information on mismatches in anticipated future net interest income.

- (b) stable net interest income presentation—net interest income would be reported on the assumption that a bank’s dynamic risk management objective is to stabilise net interest income. The revaluation effect from dynamic risk management activities would provide information about how successfully a bank achieved its objective for both realised and future net interest income.
- 6.1.14 There are some clear benefits to the actual net interest income presentation alternative. This alternative would provide a pre- and post-dynamic risk management view of net interest income; it would provide information on the revaluation effect arising from net open risk positions relating to future net interest income; and it would be easier to implement in practice, because there would be no change to the accounting for interest revenue or interest expense from the managed exposures in the managed portfolio.
- 6.1.15 The stable net interest income presentation alternative would present a stable net interest income profile based on the bank’s objective to stabilise its net interest income, irrespective of whether or not the bank has been able to achieve such a stable profile through its dynamic risk management activities. It is possible that the results of a bank’s dynamic risk management activity will be different from its targets. Since this presentation alternative fails to reflect this divergence, some argue that it does not provide information on actual dynamic risk management.
- 6.1.16 The following example illustrates both presentation alternatives in the statement of comprehensive income. Assume that a bank only has a portfolio of 6-year fixed interest rate loans that is funded by a portfolio of variable interest rate liabilities. The bank manages interest rate risk dynamically based on the net open risk position (for purposes of simplification, the example does not consider changes in the portfolio arising from exposures maturing or being added). As part of the bank’s dynamic risk management objective, it has chosen to eliminate 80 per cent of the existing interest rate mismatch using a 6-year IRS. Assuming that the scope of the application of the PRA is a focus on dynamic risk management, the bank applies the PRA to this portfolio. For simplicity, it is assumed that the benchmark pricing rate for the fixed interest rate loans and the associated funding index are the same (ie they are both based on the 6-month LIBOR curve). Hence, the managed risk is 6-month LIBOR. The customer margin is not included within the PRA.

Financial instrument	Notional	Interest rate basis	Interest rate	Interest rate risk included in the PRA
Loan	CU100m	Receive fixed interest rate annually on 31 December (initial market + customer margin)	4% (= 3% + 1%)	3% (ie initial rate based on 6-month LIBOR curve)
Deposit	CU100m	Pay 6-month LIBOR on 31 December and 30 June	6-month LIBOR	6-month LIBOR
IRS	CU80m	Receive 6-month LIBOR on 31 December and 30 June  Pay fixed interest rate annually on 31 December	6-month LIBOR  3%	6-month LIBOR  3%

6.1.17 The bank has stabilised its net interest income to the targeted extent (ie 80 per cent).

Market rates <sup>(a)</sup>	31 Dec 20X0	30 Jun 20X1	31 Dec 20X1	30 Jun 20X2	31 Dec 20X2
Annualised LIBOR rate (used for denominator in fixed interest rate present value calculation)	3%	2.8%	2.5%	3.3%	4%
LIBOR for 6-month period (used for numerator and denominator in the variable interest rate present value calculation)	1.49%	1.37%	1.24%	1.61%	1.98%

(a) Assuming a flat yield curve in each period.

**Actual net interest income presentation**

		<b>30 Jun 20X1</b>	<b>31 Dec 20X1</b>	<b>30 Jun 20X2</b>	<b>31 Dec 20X2</b>
Interest revenue	(a)	2.0	2.0	2.0	2.0
Interest expense	(b)	(1.49)	(1.37)	(1.24)	(1.61)
Net interest from dynamic risk management	(c)	(0.01)	(0.10)	(0.21)	0.09
<b>Net interest income</b>	(d)	0.5	0.53	0.55	0.48
Revaluation effect from dynamic risk management	(e)	0.25	0.21	(0.67)	(0.52)
<b>Total profit or loss for the 6 month period</b>	(f)	0.75	0.74	(0.12)	(0.04)

6.1.18 The following analysis explains the different profit or loss lines under the actual net interest income presentation:

- (a) actual interest revenue accrued for the loan portfolio (ie 4 per cent annually) with no change to existing interest revenue recognition requirements.
- (b) actual interest expense accrued for the deposit portfolio (ie 6-month LIBOR) with no change to existing interest expense recognition requirements.
- (c) net interest accrual from risk management instruments (ie receive 6-month LIBOR and pay 3 per cent annually on CU80 million in this fact pattern).
- (d) reported net interest income would be consistent with the bank's actual dynamic risk management objective, because a stable net interest income is achieved for 80 per cent of the portfolio, but net interest income achieved on the unhedged 20 per cent varies as 6-month LIBOR varies.
- (e) net of *clean fair value* changes from derivatives and clean revaluation changes arising from the managed portfolios. In this fact pattern it would represent the difference between the revaluation of all the dynamically managed exposures including the 20 per cent unhedged position and the remeasurement of the risk management instruments being used to manage the risk.
- (f) net profit or loss would be the same under both presentation alternatives.

6.1.19 As can be seen from the example, the actual net interest income alternative would require interest accruals from risk management instruments to be presented as part of the net interest income. This presentation would provide relevant information about how the dynamic risk management activity has altered the net interest income in the reporting period.



**Stable net interest income presentation**

<b>CU</b>		<b>30 Jun 20X1</b>	<b>31 Dec 20X1</b>	<b>30 Jun 20X2</b>	<b>31 Dec 20X2</b>
Interest revenue	(a)	1.99 <sup>(a)</sup>	1.87	1.74	2.11
Interest expense	(b)	(1.49)	(1.37)	(1.24)	(1.61)
<b>Net interest income</b>	(c)	0.5	0.5	0.5	0.5
Revaluation effect from dynamic risk management	(d)	0.25	0.24	(0.62)	(0.54)
<b>Total profit or loss for the 6-month period</b>	(e)	0.75	0.74	(0.12)	(0.04)

(a) Interest revenue for the 6-month period is calculated as: 1 per cent customer margin annually (0.5 per cent for six months) plus LIBOR for that 6-month period (1.49 per cent).

6.1.20 The following analysis provides further insight about the breakdown of the different profit or loss lines that would be presented under the stable net interest income presentation:

- (a) interest revenue would represent the customer margin, which is not included in the managed risk (ie 1 per cent annually), plus interest accrual for the exposure that reflects the risk being managed, which, in this case, is 6-month LIBOR. In other words, the accrual would be converted to the managed risk, 6-month LIBOR, under dynamic risk management in this example. It should be noted that under this presentation alternative, the managed rate would be applied to both the hedged component and the unhedged component thereby representing the aspirational nature of the dynamic risk management objective.
- (b) in this fact pattern, actual interest expense accrued for the deposit portfolio (ie 6-month LIBOR) with no change to existing interest expense recognition requirements.
- (c) net interest income would be consistent with the dynamic risk management objective of fully stabilising net interest income. In this fact pattern, net interest income reflects a locked-in net annual margin of 1 per cent (0.5 per cent for the 6-month reporting period). This presentation would not be consistent with the bank's actual dynamic risk management objective of mitigating only 80 per cent of the interest rate mismatches in the portfolio.
- (d) net impact of fair value changes from derivatives and revaluation changes from managed portfolios would reflect the revaluation of the unhedged position (20 per cent in this fact pattern), less the stabilisation impact reported in the net interest income that was not actually achieved through dynamic risk management.
- (e) net profit or loss would be the same under both presentation alternatives.

- 6.1.21 The stable net interest income presentation would present the net interest income that a bank did not actually achieve. However, it would provide additional information on the customer margin that a bank has maintained through its dynamic risk management activities. The quantum of the adjustment between the actual net interest income and the revaluation effect to achieve a stable net interest income would provide users of financial statements with relevant information about the source of a bank's profit or loss and its sustainability. This would allow users of financial statements to understand these different sources of profit in accordance with their nature.

<b>Question 18—Presentation alternatives</b>	
(a)	Which presentation alternative would you prefer in the statement of financial position, and why?
(b)	Which presentation alternative would you prefer in the statement of comprehensive income, and why?
(c)	Please provide details of any alternative presentation in the statement of financial position and/or in the statement of comprehensive income that you think would result in a better representation of dynamic risk management activities. Please explain why you prefer this presentation taking into consideration the usefulness of the information and operational feasibility.



## 6.2 Presentation for internal derivatives

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- 6.2.1 It is common in banks for ALM to manage interest rate risk positions from open portfolios by transferring risk to a trading unit using *internal derivatives*. The traders then treat the risk position that they assume from the internal derivatives in the same way as they would treat risk positions from external exposures. Traders consider their overall exposure and may have offsetting positions from other derivatives. Consequently, in some instances the traders do not transact external derivatives to fully eliminate the risk transferred via the internal derivatives while in others they do.
- 6.2.2 One objective of the PRA is to improve the information provided about dynamic risk management. In order to separately reflect dynamic risk management and the trading activity in the financial statements, it would be necessary to gross up the offsetting internal derivatives in the statement of comprehensive income. The profit or loss from all internal derivatives would still however be offset so there would be no net impact on profit or loss (ie the risk management and the trading unit would have fully offsetting profit or loss from internal derivatives). The following table illustrates the application of the actual net interest income presentation when internal derivatives are grossed up in the statement of comprehensive income.

	<b>Risk management/banking book</b>	<b>Trading</b>
Net interest income	Accrual from external customer exposures included in the managed portfolio (for example, interest revenue on loans and interest expense on deposits).  No change to existing treatment plus net interest accrual from risk management instruments, which may include internal derivatives.	Zero
Revaluation effect arising as a result of applying the PRA	Changes to the clean revaluation of exposures included in the managed portfolio and the clean fair value changes of all risk management instruments. <sup>(a)</sup>  May include both internal and external derivatives.	Zero
Trading profit or loss	Zero	Changes in fair value of all trading instruments. <sup>(b)</sup>  May include both external and internal derivatives.
Net profit or loss	Net profit or loss from risk management and trading activity. All profit or loss from internal derivatives reported as risk management will be fully offset by profit or loss from the internal derivatives that are reported as trading. Hence, profit or loss from internal derivatives will be zero in the consolidated statement of comprehensive income at all times.	
Statement of financial position	Only external derivatives would be recognised in the consolidated statement of financial position.	
	(a) Risk management instruments will ordinarily be identified through the formal book structure of the bank.	
	(b) Trading instruments will ordinarily be identified through the formal book structure of the bank.	

6.2.3 Internal derivatives between risk management (banking book) and the trading book represent the transfer of risk from risk management to trading. As part of its control over such transfers an entity should ensure that all internal derivatives between risk management and trading areas are offset as they represent the same transaction from the perspective of both internal parties.

6.2.4 Although the net profit or loss effect from internal derivatives would be zero in the consolidated financial statements, the existence of internal derivatives between the banking book and the trading book demonstrates that dynamic risk management is undertaken by facilitating a change in the recognition of profit or loss from exposures included within the managed portfolio. This is because

the revaluation of those exposures will impact consolidated profit or loss. This is regardless of whether or not the risk transferred to the trading book via internal derivatives was passed on from the trading book to external counterparties. A requirement to prove internal derivatives are externalised has not been considered in the DP in order to apply the PRA.

- 6.2.5 Further details concerning the presentation challenges that arise when considering the internal derivatives that are identified as risk management instruments is discussed in Section A4.2.

**Question 19—Presentation of internal derivatives**

- (a) If an entity uses internal derivatives as part of its dynamic risk management, the DP considers whether they should be eligible for inclusion in the application of the PRA. This would lead to a gross presentation of internal derivatives in the statement of comprehensive income. Do you think that a gross presentation enhances the usefulness of information provided on an entity's dynamic risk management and trading activities? Why or why not?
- (b) Do you think that the described treatment of internal derivatives enhances the operational feasibility of the PRA? Why or why not?
- (c) Do you think that additional conditions should be required in order for internal derivatives to be included in the application of the PRA? If yes, which ones, and why?

### 6.3 Disclosures

- 6.3.1 Disclosures accompanying the PRA should assist users of financial statements to understand an entity's dynamic risk management activity and how the PRA has been applied in the financial statements. The IASB is seeking input from users and preparers of financial statements about disclosures that would meet this objective. Input from preparers on the feasibility and cost of obtaining that information is important, so that the IASB can weigh the needs of users of financial statements with preparers' commercial sensitivities.
- 6.3.2 Users of financial statements have previously emphasised the importance of having information about entities' risk management in the financial statements. They have said that to be useful disclosures would need to be descriptive and specific to the entity and should not be simply generic descriptions. Accordingly, four possible disclosure themes have been developed for the PRA.

**Qualitative information on the objectives and policies for dynamic risk management, including the identification of risks within exposures**

- 6.3.3 The aim of these disclosures would be to provide users of financial statements with information that would enable them to understand the managed risks, the objective of an entity's dynamic risk management with respect to those risks, how the entity undertakes risk management and the financial outcome of such

activities. These disclosures should also enable users of financial statements to better understand the effect of dynamic risk management on the net interest income and the risks involved in the business.

- 6.3.4 A qualitative description would be provided of the different types of exposures considered within the dynamic risk management and how the entity perceives the risk arising from such exposures. Information would be provided to help users of financial statements understand how the managed exposure is determined and how it links into the entity's dynamic risk management objective.
- 6.3.5 For each type of managed exposure, information would be provided to enable users of financial statements to understand the basis upon which the risk is measured and analysed. This could include information about whether the managed risk is monitored based on the contractual terms of the exposures or if risks are considered differently, such as from a behaviouralised perspective.
- 6.3.6 Qualitative information would also be disclosed on the entity's dynamic risk management policies and performance objectives. This would include a high level description of the entity's dynamic risk management processes and the extent to which risk management instruments are transacted with external or internal counterparties (for example, the trading unit).

### **Qualitative and quantitative information on the net open risk position(s) and its impact on the application of the PRA**

- 6.3.7 The rationale for these disclosures would be to provide information that enhances the understanding of users of financial statements on the way that the net open risk positions arising from the managed portfolios are measured for the purposes of applying the PRA. In addition, users of financial statements should gain insight into the entity's net open risk positions, including where the naturally occurring risks arise and to what extent it is (or is not) hedged.
- 6.3.8 Qualitative disclosures would be provided on how the net open risk position is determined, which should be consistent with the dynamic risk management approach. This would include a description of the method used for the measurement of risk within the managed portfolio and an explanation of the methodology used to calculate the revaluation adjustments on application of the PRA, including any changes to the techniques during the period and an explanation of the reason for the change. In addition, information would be provided on the estimation techniques that are used for dynamic risk management and accounting purposes. In particular, information about any reliance on subjective or judgemental inputs would be important (for example, the role of prepayment curves or other non-market driven factors).
- 6.3.9 Quantitative information would be provided on the net open risk position(s) and on the portfolio revaluation adjustment recognised at the reporting date. Some information about an entity's risk position can be commercially sensitive.

Consequently, preparers are requested to provide suggestions about information that would be useful to users of financial statements without compromising entities' commercial sensitivities.<sup>32</sup>

- 6.3.10 Quantitative disclosure on the net open risk position(s) would be required to assist users of financial statements to understand the extent to which the net open risk position(s) is based on expected rather than contractual terms of the managed exposures. Ideally, this could include a comparison of contractual and behaviouralised features for exposures included in the PRA.
- 6.3.11 A key factor in determining the appropriate presentation in the statement of financial position is whether it would be useful to have a breakdown of the portfolio revaluation adjustments by class of financial instrument and, if so, whether this should be provided in the statement of financial position or in the notes. As dynamic risk management is usually undertaken on a net basis, gross information by class of financial instrument may not be considered relevant. An alternative view is that users of financial statements would probably be interested in knowing the concentrations of interest rate risk by source, particularly if there are significant risk concentrations from risk exposures that involve more subjective elements (for example, modelling of customer behaviour).
- 6.3.12 This information would typically be based on the net open risk position as at the reporting date. However, if the net open risk position at the reporting date was not representative of the positions throughout the year, then additional disclosures providing an indication of the more representative position might provide relevant insight to an entity's dynamic risk management activity during the period.
- 6.3.13 Many, but not all, of the disclosures would be based on existing risk information that entities currently use for financial reporting purposes, however, there may be an operational impact as a result of providing this information. The IASB is also therefore seeking information about the operational feasibility of these disclosures.

### **Application of the PRA**

- 6.3.14 The objective of these disclosures would be to provide users of financial statements with information that explains the extent to which the accounting represents dynamic risk management, and how dynamic risk management is reflected in the financial statements. Accordingly, disclosures would also provide users of financial statements with information that enables them to understand the differences in approach between the accounting applied and the dynamic risk management approach.

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<sup>32</sup> Some believe that it would be necessary to provide detailed disclosures about the calculation of the net open risk position, the actual revaluation and/or the sensitivity (duration in the case of interest rate risk) when modelling techniques are used (for example, for mortgages and core demand deposits). This is because small changes in key inputs that include subjective factors (for example, the expected duration of mortgages) could have significant consequences on the revaluation and thus on the accounting results. At a minimum, it would be useful to have an understanding of the reliance on these assumptions when there have been changes in the assumptions that have a material impact on the calculations. It would also be useful to know the reasons why the assumptions were changed would be useful information.

- 6.3.15 A full description of an entity's accounting policy for the application of the PRA would be required by IAS 1 *Presentation of Financial Statements*. This description should provide sufficient detail for users of financial statements to understand how and to what extent the PRA has affected the financial statements.
- 6.3.16 Qualitative disclosures may be required if a final Standard includes an element of choice about which exposures within the dynamic risk management the PRA is applied to (see Section 5). These disclosures would provide users of financial statements with an understanding of how portfolios were selected for inclusion, why the approach has not been applied to all dynamically managed exposures and which exposures were not selected by the entity for inclusion within the scope of the PRA.
- 6.3.17 Furthermore, if any elements of dynamic risk management are ultimately not eligible for inclusion within the scope of the PRA, additional disclosures on those activities or exposures may be appropriate to provide information on an entity's dynamic risk management activities.

**Quantitative and qualitative information on the impact of dynamic risk management on the current and future performance of an entity**

- 6.3.18 The aim of these disclosures would be to assist users of financial statements to gain a better understanding of the impact of dynamic risk management on an entity's reported results in the current and future periods.
- 6.3.19 Section 6.1 discusses two alternative presentations in the statement of comprehensive income. Some benefits of the actual net interest income presentation were highlighted, including that information on net interest income for the reporting period both pre- and post-dynamic risk management activity would be provided on the face of the statement of comprehensive income. This would reduce the need for extensive disclosures on the components of the net interest income.
- 6.3.20 For example, users of financial statements are likely to be interested in information on the sensitivity of an entity's future net interest income to changes in interest rates after dynamic risk management, based on the entity's net open risk positions on the reporting date. However, because that information is likely to be considered commercially sensitive, suggestions of ways to provide information that is helpful for users of financial statements while being mindful of these considerations would be useful.
- 6.3.21 Users of financial statements may also find it helpful to understand the drivers of the profit or loss from the PRA, such as disclosures on the sensitivity of both the reported net interest income and the revaluation effect in the period. This could include a sensitivity disclosure for changes in the managed risk and the key assumptions.

**Question 20—Disclosures**

- (a) Do you think that each of the four identified themes would provide useful information on dynamic risk management? For each theme, please explain the reasons for your views.
- (b) If you think that an identified theme would not provide useful information, please identify that theme and explain why.
- (c) What additional disclosures, if any, do you think would result in useful information about an entity's dynamic risk management? Please explain why you think these disclosures would be useful.

**Scope of disclosures**

- 6.3.22 As well as considering the type of disclosures that are appropriate, it is necessary to consider the scope of those disclosures. Usually, the scope of the disclosures follows that of the scope of the application of the relevant IFRS. However, disclosure about an entity's full exposure to a dynamically managed risk could be relevant in providing meaningful information about dynamic risk management in the financial statements, regardless of the entity's scope of application of the PRA. This would be relevant even if the scope of application of the PRA is narrower (ie the scope of application is a focus on risk mitigation and not a focus on dynamic risk management). This Section discusses whether the disclosures should follow the scope of the application of the PRA if the scope is a focus on risk mitigation or whether disclosures should be extended more broadly based on the existence of dynamic risk management.
- 6.3.23 Disclosure of an entity's full exposure to a dynamically managed risk could improve comparability between entities applying the PRA, if accounting choices are available. Otherwise, entities with similar approaches to dynamic risk management could have different disclosures if they make different accounting choices. However, if the scope of the disclosures is not aligned with the application of the PRA, there is a potential overlap with the disclosures required by other Standards. Furthermore, it would be necessary to define dynamic risk management more precisely, which may be difficult because of the range of dynamic risk management practices that exist.
- 6.3.24 The following example highlights potential alternatives identified for the scope of disclosures about dynamic risk management. Assume a banking group has two banking subsidiaries, one of which (Sub A) manages all interest rate risk dynamically and the other (Sub B) manages interest rate risk on a more static basis. The interest rate risk dynamically managed by Sub A comprises a number of sub-portfolios: A1, A2 and A3. A1 includes the deemed interest rate risk from the EMB. Sub A hedges only A2.



	<b>Assumed scope of the application of the PRA<sup>(a)</sup></b>	<b>Alternatives for the scope of disclosures on dynamic risk management</b>
1	A focus on dynamic risk management: to include A1, A2 and A3 in Sub A (assuming all exposures are eligible including EMB).	(a) to match the application of the PRA (Sub A only); or (b) all exposures in Sub A and Sub B; wherever the managed risk exists, hence, even though only Sub A dynamically manages interest rate risk, the fact that the managed risk exists in Sub B also brings those exposures into the disclosure requirements.
2	A focus on dynamic risk management: to include all eligible dynamically managed exposures (assuming that EMB is not eligible). The PRA is applied to A1, A2 and A3 in Sub A, but excludes any deemed risk from EMB.	(a) to match the application of the PRA (Sub A with the exclusion of EMB); (b) all eligible exposures (Sub A only) plus disclosures on the interest rate risk from EMB; or (c) all exposures in Sub A and Sub B (same as 1(b)).
3	A focus on risk mitigation (sub-portfolio approach): bank chose only to apply the PRA to A2 (assume all exposures are eligible).	(a) to match the application of the PRA (A2 only); (b) a focus on dynamic risk management (Sub A): linked to instances of dynamic risk management, regardless of accounting application; or (c) all exposures in Sub A and Sub B (same as 1(b) and 2(c)).

(a) Section 5.2 discusses different scope alternatives.

6.3.25 It may be difficult to argue that the disclosures should be applied comprehensively in respect of an entity's exposure to a risk for which there is some dynamic risk management (see 1(b), 2(c) and 3(c)), simply because in some circumstances, or parts of the business, that risk occurs. This may not actually provide useful information on an entity's dynamic risk management at all, because it includes exposures that are not dynamically managed.

6.3.26 The more pertinent issue is whether disclosures provided in respect of portfolios that are dynamically risk managed (as described in 1(a), 2(b) and 3(b)) or in respect of exposures for which the PRA has been applied (as described in 1(a), 2(a) and 3(a)) provides the most useful information in the financial statements about dynamic risk management.

**Question 21—Scope of disclosures**

- (a) Do you think that the scope of the disclosures should be the same as the scope of the application of the PRA? Why or why not?
- (b) If you do not think that the scope of the disclosures should be the same as the scope of the application of the PRA, what do you think would be an appropriate scope for the disclosures, and why?

## Section 7 Other considerations

### 7.1 Date of inclusion of exposures in a managed portfolio

- 7.1.1 If exposures are included in the managed portfolio when the revaluation adjustment of the exposure with respect to the managed risk is nil (ie implied par), no incremental Day 1 revaluation adjustment would be required. This would usually be the case when the entity first becomes a party to the contract.
- 7.1.2 However, complexities arise if an exposure is first included in the managed portfolio after the risk level has changed. The difference between the current revaluation and the revaluation at the time that the entity became party to the contract could either need to be recognised as a Day 1 profit or loss or amortised to profit or loss over time. Recognition in profit or loss on Day 1, reflecting changes to benchmark indexes during a period when the exposure was not dynamically managed, would result in a profit or loss impact that does not reflect dynamic risk management activity and may be open to the application of hindsight. Amortisation of Day 1 revaluations would significantly increase operational complexity and may reduce the usefulness of reported profit or loss.
- 7.1.3 The PRA explored in this DP only considers managed exposures to be an eligible part of the managed portfolio if added when an entity first becomes a party to the contract.<sup>33</sup> The IASB acknowledges that limiting the inclusion of exposures in the managed portfolios would create a possible divergence between accounting and dynamic risk management and is asking for respondents' views on this issue.

<b>Question 22—Date of inclusion of exposures in a managed portfolio</b>	
Do you think that the PRA should allow for the inclusion of exposures in the managed portfolios after an entity first becomes a party to a contract? Why or why not?	
(a)	If yes, under which circumstances do you think it would be appropriate, and why?
(b)	How would you propose to account for any non-zero Day 1 revaluations? Please explain your reasons and comment on any operational implications.

### 7.2 Removal of exposures from a managed portfolio

- 7.2.1 If managed exposures are prepaid or sold, they will be derecognised and any revaluation adjustments would need to be removed from the statement of financial position and recognised in profit or loss.
- 7.2.2 However, if managed exposures are permitted to be removed from the managed portfolio prior to their maturity or derecognition, whichever is earlier, this

<sup>33</sup> An exception to this is pipeline transactions, which are deemed to attract revaluation risk prior to the entity becoming party to a contract (see Section A2).

would either require amortisation of the revaluation adjustment recognised to that point, which would be operationally burdensome, or immediate recognition of the revaluation adjustment in profit or loss, which would be unlikely to reflect the outcome of the dynamic risk management activity.

**Question 23—Removal of exposures from a managed portfolio**

- (a) Do you agree with the criterion that once exposures are included within a managed portfolio they should remain there until derecognition? Why or why not?
- (b) Are there any circumstances, other than those considered in this DP, under which you think it would be appropriate to remove exposures from a managed portfolio? If yes, what would those circumstances be and why would it be appropriate to remove them from the managed portfolio?
- (c) If exposures are removed from a managed portfolio prior to maturity, how would you propose to account for the recognised revaluation adjustment, and why? Please explain your reasons, including commenting on the usefulness of information provided to users of financial statements.

### 7.3 Risk management of foreign currency instruments

- 7.3.1 This DP focuses on the application of the PRA to banks' dynamic risk management of interest rate risk. However, because it is common for banks to raise funding and make loans in currencies other than their functional currency, they are likely to be exposed to FX risk as well as interest rate risk from these portfolios. This Section considers how the PRA could be applied to account for both dynamic risk management of FX risk and interest rate risk.
- 7.3.2 There are various approaches that a bank might take towards the management of FX risk. Consequently, the PRA might need to be applied in different ways to reflect these different approaches. Assume a bank has access to a source of funding in a foreign currency, which it uses to fund its lending portfolio. Risk management of the FX risk from this funding source can be undertaken in a variety of ways, depending on the lending that is financed by the foreign currency funding and the bank's approach to this risk. Three potential alternative risk management approaches are considered below, but other variations are also possible.
- 7.3.3 Scenario A—a bank manages its business in its functional currency. Consequently, all foreign currency exposures are converted into functional currency exposures using derivatives on a one-to-one basis (for example, by transacting a cross-currency swap for each foreign currency debt issuance). The resulting net open functional currency interest rate risk position is included within the bank's dynamic risk management of interest rate risk.

- 7.3.4 Scenario B—a bank only raises funding in a foreign currency for lending to customers in the same currency. The interest rate risk in each foreign currency portfolio is dynamically managed in that foreign currency.
- 7.3.5 Scenario C—a bank lends and raises funds in a foreign currency in the normal course of business. This is managed using cross-currency derivatives on a portfolio basis. The interest rate risk for each foreign currency portfolio is dynamically managed in that foreign currency.
- 7.3.6 Analysis for Scenario A—the FX exposure on the foreign currency borrowing and an associated cross-currency derivative is treated as an aggregated exposure, which is then included within the functional currency interest rate portfolio (the managed portfolio) for dynamic risk management. Two potential approaches arise for the accounting of the dynamic risk management activity with respect to the foreign currency borrowing:
- (a) similar to the IFRS 9 guidance on aggregated exposures, the managed exposure for the purposes of applying the PRA would be the combination of the debt and the derivatives (see paragraph 6.3.4 of IFRS 9). Accounting for the foreign currency debt and cross-currency swaps would be in accordance with IFRSs. The PRA would then be applied to reflect the dynamic management of the interest rate risk on the ‘aggregate’ functional currency exposure. This approach is consistent with the organisation of risk management whereby FX risk and interest rate risk are managed separately and differently, possibly by different teams. It is also consistent with the view that the PRA should be based on the risks that are dynamically managed, rather than on all the risks that are present in the managed exposure.
  - (b) the foreign currency borrowings would be part of the managed exposures for the purposes of the PRA. The risk management instruments would include any interest rate and currency swaps associated with the dynamic risk management of the foreign currency borrowing, which would be accounted for in accordance with the relevant Standards. Fair value changes in the interest rate and cross-currency derivatives would provide a degree of offset to the revaluation of the foreign currency debt as part of the PRA, to the extent that economic offset exists.
- 7.3.7 Analysis for Scenario B—the PRA would be applied to the foreign currency lending and funding exposures. Fair value movements from risk management instruments that mitigate the interest rate risk in the foreign currency portfolio should provide offset in the profit or loss for the effect of the revaluation of that portfolio with respect to interest rate risk.
- 7.3.8 However, additional analysis may be required on the interaction of the PRA with IAS 21 *The Effects of Changes in Foreign Exchange Rates*. This is to ensure that any offsetting revaluation effects with respect to FX risk and interest rate risk are presented in the same profit or loss line, so that any economic offsetting is reflected. For example, if the IAS 21 translation effect in profit or loss on the adjusted carrying value of the foreign currency exposures is not presented in the same line as the fair value changes in the derivatives, then the full extent of

offset would not be apparent on the face of the statement of comprehensive income. This issue is exacerbated if the alternative approach of the PRA through other comprehensive income (OCI) is applied (see Section 9).

- 7.3.9 Analysis for Scenario C—because of the nature of the risk management for FX risk and interest rate risk, the application of the PRA for both FX risk and interest rate risk should provide a faithful representation of dynamic risk management. This approach is similar to approach (b) in Scenario A.

**Question 24—Dynamic risk management of foreign currency instruments**

- (a) Do you think that it is possible to apply the PRA to the dynamic risk management of FX risk in conjunction with interest rate risk that is being dynamically managed?
- (b) Please provide an overview of such a dynamic risk management approach and how the PRA could be applied or the reasons why it could not.

## Section 8 Application of the PRA to other risks

- 8.1 In this DP the IASB is exploring developing an accounting approach for dynamic risk management activities that would accommodate the management of different types of risk, ie not limit any approach for accounting for dynamic risk management activities to interest rate risk or banks. The IASB is aware that dynamic risk management activities are undertaken in other industries and for risks other than interest rates. For example, the IASB understands that FX risk and commodity price risk may also be managed dynamically on the basis of open portfolios.<sup>34</sup>
- 8.2 Nevertheless, the development of the PRA for dynamic risk management activities has centred on dynamic interest rate risk management in the banking sector. This is because it is a well-known and documented example.
- 8.3 The IASB is using this DP to obtain specific input on whether, and if so how and when, the PRA could be applied to dynamic risk management other than that undertaken in respect of interest rate risk by banks, and whether there is a need for a model to address the other applications of dynamic risk management.
- 8.4 One rationale for undertaking dynamic risk management activity for interest rate risk is to alter the (net) interest income from a managed portfolio in such a way that it has the targeted sensitivity to changes in market interest rates. This is usually achieved by balancing the timing and basis of future market interest rate fixings of exposures within the portfolio, combined with the use of derivatives to mitigate residual interest rate mismatches.
- 8.5 This rationale could be applied to describe dynamic risk management for other risks, in which management wish to manage the net margin or yield from a particular portfolio of transactions with respect to a specific market risk. For example, net commodity price risk may arise from purchases and sales (and inventory).<sup>35</sup> In the event that the pricing of both purchase and sale contracts are based on the market price of the commodity, dynamic risk management activity might focus on identifying pricing mismatches in purchases and sales (and inventory). Another example would be an entity that has purchased a commodity, but has not fixed the ultimate sales price and hence remains sensitive to movements in the market price of that commodity, for example, an energy company that buys gas to supply to customers. Without dynamic risk management activity (to protect the sales price of the gas) this will result in an unstable net margin. In order to eliminate that commodity price risk from the net fixed-price position, risk managers may use commodity derivatives to reduce the risk of variability in net margin.
- 8.6 There are further similarities in the way that banks and other industries undertake dynamic risk management activity:
- (a) new exposures are added and existing exposures mature over time, with risk management undertaken on the net residual risk;

<sup>34</sup> Commodity price risk in the context of this DP is the existence of fixed-price exposures that expose an entity to movements in commodity prices.

<sup>35</sup> For some commodities, inventory positions are included within the net open risk position. Inventory is considered as a fixed-price position.

- (b) price risk is often considered in time bands;
  - (c) dynamic risk management is mostly undertaken by risk rather than focusing on the full price of sales and purchases;
  - (d) risk may be transferred to a central risk management unit possibly via transfer pricing transactions;
  - (e) in some industries, modelling of risk may be undertaken based on behavioural or other factors, for example, the estimation of the volume of electricity utilised, or the take up of new customer contracts to replace existing customers; and
  - (f) hedging strategies may not fully eliminate identified risks, which may be due to the availability or cost of suitable risk management instruments or a strategic management decision to leave the positions unhedged.
- 8.7 Considering these similarities, the application of the PRA as described for banks' dynamic interest rate risk management may provide useful information about dynamic risk management of commodity and other risks.

### **Application of the PRA to dynamic risk management activities for commodity price risk and FX risk**

- 8.8 If the PRA were to be applied to the dynamic risk management of commodity price risk, all exposures within the managed portfolio (ie the firm commitments to buy or sell the commodity, plus inventory) would be revalued with respect to the managed risk (ie commodity price excluding other pricing factors). Changes in revaluation of the managed portfolio with respect to the managed risk would be recognised in profit or loss, assuming that the OCI alternative is not considered (see Section 9). This revaluation of the managed portfolio would provide an offsetting effect in profit or loss of the fair value changes arising from risk management instruments, to the extent that an economic offset exists.
- 8.9 However, the PRA would not be suitable in some circumstances and the general hedge accounting requirements and the fair value option in IFRS 9 and IAS 39 may provide suitable alternatives.<sup>36</sup>
- 8.10 The following are some initial considerations on the potential suitability of the PRA to additional scenarios in which risk is managed dynamically:
- (a) an entity may manage the price risk from portfolios of purchases and sales separately, if the price drivers of their purchases and sales are not the same. This could be because of price regulation, customer expectations (price inelasticity) or other pricing factors that are only evident in either purchases or sales. There are different dynamic risk management strategies under this scenario:
    - (i) if the entity wants to achieve a stable margin, the strategy may be to achieve fixed prices in the portfolios of purchases and sales separately, but over similar time frames. However, if the PRA is

<sup>36</sup> These include cash flow hedge accounting (see paragraph 6.5.11 of IFRS 9), hedges of groups of items (see paragraph 6.6 of IFRS 9) and the fair value option for contracts for an entity's expected purchases or sales (so called 'own use' contracts; see paragraphs 5 and 5A of IAS 39).



applied to a risk management strategy to achieve fixed prices in either purchases or sales separately, it is not likely to result in useful information. Application of the cash flow hedge accounting requirements in accordance with IFRS 9 and IAS 39 would be likely to produce a more faithful representation of the actual risk management.

- (ii) an entity may wish to be able to participate in changes in a particular market price. Therefore the strategy may be to reintroduce variable pricing by transacting derivatives. For example, a mining entity has fixed costs that are unrelated to the commodity price risk (for example, extraction costs) but sales prices are sensitive to commodity prices. If a large proportion of sales are from fixed-price contracts, the mining entity may enter into commodity forward contracts at a fixed price to unwind the pricing effect of the fixed-price sales contracts, allowing the entity to participate in future changes in the commodity price. Revaluation of the portfolio of sales contracts for changes in the commodity price risk may provide an offset to the fair value of the commodity price risk management instruments.
  - (b) an entity may manage FX risk dynamically from committed transactions (firm commitment sale and purchase contracts) on a portfolio basis, hedging the net FX risk from committed purchases and sales with forward FX contracts. Revaluation of the net FX risk and the fair value changes in FX derivative contracts could provide useful information on the risk management activities.<sup>37</sup>
- 8.11 However, even when there are similarities in the approaches of banks and other entities to dynamic risk management, the suitability of the PRA cannot be assumed as some known issues for banks may be even more significant for other industries.
- 8.12 If the scope of application is a focus on dynamic risk management then exposures will exist within the managed portfolio for which no risk mitigation through the use of derivatives has been undertaken. Consequently, this will result in volatility in profit or loss arising from the revaluation effect of such unhedged open positions.
- 8.13 The risk management objective for many entities is to manage the net margin achieved, rather than to fully stabilise it. This can involve dynamic risk management decisions to try to alter the net margin profile based on expected price developments within delegated risk limits. As a consequence, there may be variations in the dynamic risk management strategy for different time horizons (for example, certainty may be the aim for nearer exposures due to the current levels of price volatility). Consequently, it is not uncommon for entities to have a policy of building up their hedging strategies over time. As the expected date of occurrence of the exposures becomes closer, a higher proportion of the exposure is hedged. For example a risk management policy may target hedging 40 per cent of exposures in the 2–3 year band, 70 per cent in

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<sup>37</sup> Other hedge accounting approaches may also provide a suitable representation of this fact pattern.

the 1–2 year band and 100 per cent in the next 12 months. If all the identified exposures that are dynamically managed were required to be included in the managed portfolio, the application of the PRA could result in significant volatility in profit or loss arising from the revaluation of such open positions. The effect depends on the scope of the application of the PRA (The scope of the application of the PRA is considered in the context of banks' management of interest rate risk in Section 5).

- 8.14 Much of the risk management activity discussed so far has been in relation to firm commitment sale and purchase contracts or recognised inventory. However, it is common for entities to include forecast transactions within managed risk portfolios. There are conceptual difficulties in recognising revaluation effects of forecast transactions for accounting purposes, even if such exposures are considered to be highly probable (see Section A3).
- 8.15 Some other key differences between banks' dynamic risk management of interest rate risk and the dynamic management of other risks that may warrant additional consideration are:
- (a) when hedging foreign currency risk arising from a portfolio of monetary items, the requirements of IAS 21 to retranslate such exposures may make an incremental accounting approach for such dynamic risk management unnecessary.
  - (b) the calculation of the commodity price risk positions often includes inventory (treated as a fixed-price asset). In this case, inventory would need to be revalued for the managed risk on application of the PRA to reflect dynamic risk management.<sup>38</sup> Otherwise a crucial element of the risk position would not be included, which would arguably not result in useful information being provided about the risk position.
  - (c) dynamic risk management is often undertaken to stabilise the net margin for changes in a particular commodity price. There may be situations in which the pricing of the purchase and sale contracts making up the net margin have significantly different degrees of sensitivity to the particular commodity price. This could be due to different geographical locations, levels of refinement, quality or purity, as well as regulatory influences and customer behaviour with respect to pricing. In these circumstances, the question arises as to whether revaluation of those exposures with respect to changes in the same commodity price provides useful information about those dynamic risk management activities.
  - (d) dynamic risk management may be undertaken on a full fair value basis, rather than focusing on a particular pricing sensitivity of the managed exposures (ie by risk). When the exposures are contracts to buy or sell non-financial items that are deemed to be 'own use' contracts (such as contracts to buy or sell particular commodities), the entity should consider whether the fair value option may provide the best

<sup>38</sup> This is similar to the ability to include inventory as the hedged item in fair value hedges as illustrated by Section F3.6 of the Implementation Guidance of IAS 39.

representation of the dynamic risk management activity.<sup>39,40</sup> However, the fair value option is only available for contracts that meet the own use definition and is only available at inception of a contract and is irrevocable.

- (e) some instances may occur when not all of the contracts that are risk managed together meet the own use criteria. In this scenario the fair value option would not be available for all those contracts, and so applying the PRA may be preferred, because it could be applied to all contracts that are managed together.
- (f) the PRA requires an ability to revalue the managed portfolios by risk. While valuations are often integrated into banks' processes and systems, existing valuation capabilities in entities other than banks may be less robust. Therefore, the initial operational impact of implementing the PRA might be greater outside the banking sector.

<b>Question 25—Application of the PRA to other risks</b>	
(a)	Should the PRA be available for dynamic risk management other than banks' dynamic interest rate risk management? Why or why not? If yes, for which additional fact patterns do you think it would be appropriate? Please explain your fact patterns.
(b)	For each fact pattern in (a), please explain whether and how the PRA could be applied and whether it would provide useful information about dynamic risk management in entities' financial statements.



<sup>39</sup> 'Own use' contracts are defined in paragraph 5 of IAS 39.

<sup>40</sup> IFRS 9 introduced a consequential amendment to paragraph 5A of IAS 39 to permit an irrevocable fair value option for contracts that meet the definition of 'own use' contracts, if doing so eliminates or significantly reduces an accounting mismatch.

## Section 9 Alternative approach—PRA through other comprehensive income

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- 9.1 If the scope of the application of the PRA is a focus on dynamic risk management, it can lead to volatility in profit or loss arising from the revaluation of the net open risk positions for which no risk mitigation through hedging has been undertaken. While this information is potentially useful, the IASB considered whether the resulting volatility in profit or loss presents this information in the most relevant way. Many preparers note that dynamic risk management often focuses on managing net interest income cash flows, rather than revaluation risk. As a consequence, these preparers are concerned that an accounting approach based on revaluation may not appropriately portray dynamic risk management. There is also a concern expressed by some about the lack of comparability with entities that choose not to undertake dynamic risk management.
- 9.2 This Section considers an alternative approach to the PRA. Under this alternative, the revaluation would occur as set out in this DP but the net effect of the revaluation of the managed portfolios and the changes in the fair value of the risk management instruments would be recognised in OCI rather than in profit or loss. When considering applying the PRA through OCI only the actual net interest income presentation approach can be applied (see Section 6.1). Application of the PRA through OCI would not be compatible with a stable net interest income presentation alternative, because under this presentation alternative the profit or loss would always present a perfectly hedged position, which will not always be the case.
- 9.3 Using the OCI approach, the net effect of the revaluation of the future cash flows from managed portfolios with respect to the managed risk and the remeasurement of risk management instruments would be recognised in OCI. Net interest income in the current period would be presented after dynamic risk management. In the statement of financial position the full fair value of the risk management instruments and the revaluation of the managed portfolios for the managed risk would be recognised. As risk management instruments and managed exposures mature, the revaluation from the dynamic risk management activities recognised in OCI would tend towards zero over time.
- 9.4 The PRA through OCI would still result in the same information being provided in the financial statements. However, profit or loss would only reflect the impact that the dynamic risk management activity had on the net interest income recognised in the current reporting period, with the effect on future net interest income being recognised in OCI (ie the revaluation effect from dynamic risk management would be recognised in OCI rather than in profit or loss). The accounting entries would be as follows:

### Managed portfolios

DR/CR <sup>(a)</sup>	Revaluation	SFP <sup>(b)</sup>	X + Y
CR/DR	Interest accrual	NII <sup>(c)</sup>	(X)
CR/DR	Clean revaluation	OCI	(Y)

*continued...*

...continued

**Risk management instruments**

DR/CR	Change in fair value	SFP	(A + B)
CR/DR	Net interest accrual	NII	A
CR/DR	Clean fair value change	OCI	B

(a) The entry could either be a debit or a credit, hence both are reflected.

(b) SFP refers to the statement of financial position.

(c) Recognised in profit or loss as part of net interest income (NII).

- 9.5 A key consideration is whether this alternative approach would enhance the usefulness of the information provided about how a bank has altered its net interest income profile in the current period, while maintaining the broader information on dynamic risk management activities that relate to future net interest income as compared to the PRA through profit or loss. The PRA through OCI may be relevant if the use of OCI facilitated the application of the PRA to a broader scope of items (for example, if application were based on a focus on dynamic risk management rather than a focus on risk mitigation). Feedback from users of financial statements on this issue would be particularly valuable to the IASB.
- 9.6 The DP A Review of the *Conceptual Framework for Financial Reporting* (the 'DP on the *Conceptual Framework*') explored whether items should be classified in OCI, when doing so enhances the usefulness of information in profit or loss about the return that an entity has achieved in the current period. The PRA through OCI would convey the same information about an entity's dynamic risk management activity, but would present it in a way that is more consistent with the prospective dynamic risk management view. For instance, because the revaluation effect provides information on the net open interest rate risk positions for future net interest income, it may not be considered relevant to the entity's return from resources in the current period, but would be useful because it shows the future risk profile of the entity appropriately.
- 9.7 There are some important practical and conceptual issues to be considered before this approach could be pursued. These include the following:
- (a) this alternative is inconsistent with an assumption that has been applied in developing the PRA, ie that all risk management instruments will be measured at fair value with changes in fair value being recognised in profit or loss;
  - (b) the treatment of internal derivatives may need to be changed or reconsidered, because the gross presentation of internal derivatives would no longer net to zero in profit or loss;<sup>41</sup>
  - (c) recycling from OCI into profit or loss will not occur if managed exposures are sold or risk management instruments are terminated; and
  - (d) whether the approach is consistent with the suggestions in the DP on the *Conceptual Framework* for the purpose of OCI.

<sup>41</sup> The gross presentation of internal derivatives would net to zero in the statement of comprehensive income (ie considering both fair value changes recognised in profit or loss and changes recognised in OCI).

9.8 Section A5 explores this alternative in more detail.

**Question 26—PRA through OCI**

Do you think that an approach incorporating the use of OCI in the manner described in paragraphs 9.1–9.8 should be considered? Why or why not? If you think the use of OCI should be incorporated in the PRA, how could the conceptual and practical difficulties identified with this alternative approach be overcome?

## Appendix

Sections A1–A5 provide supplementary analyses to the discussions introduced in the main Sections of this DP. Section A6 compiles all the questions for which the IASB seeks feedback from respondents. Section A7 is a glossary.

### A1 Equity model book

A1.1 As noted in Section 3.3, some banks manage the interest rate risk exposure that arises from their own equity instruments by disaggregating its return into:

- (a) a base return that is similar to interest (compensation to equity holders for providing funding); and
- (b) a residual return that results from the total net income that accrues to equity holders.

When the return on equity is disaggregated in this manner, dynamic interest rate risk management is usually undertaken to ensure that the net interest income earned at least meets the target 'base return' for the equity holders. By modelling the targeted base return as an interest rate risk profile using, for example, a replication portfolio and including that interest rate risk profile within the managed portfolio, risk managers can manage the return to reflect that objective.<sup>42</sup>

A1.2 Consider the following example:

<b>Assets</b>	<b>CU million</b>	<b>Liabilities</b>	<b>CU million</b>
5-year fixed interest rate assets	60	5-year fixed interest rate liabilities	60
1-month variable interest rate assets	40	1-month variable interest rate liabilities	15
		<b>Equity (deemed fixed interest rate exposures)</b>	<b>25</b>
	<hr/> 100		<hr/> 100

A1.3 In this example, if the bank did not consider a return on the equity model book (EMB) within its dynamic risk management activities, there would be no need to transact risk management instruments, because the interest rate risk from the portfolios would be largely offset (ie matching 5-year fixed interest rate exposures on CU60 million of assets and liabilities). However, the return to equity holders would be sensitive to changes in interest rates, because of the variable interest revenue from the variable rate asset portfolio. If benchmark interest rates fell, the bank would suffer deterioration in the net interest income

<sup>42</sup> In this context, the replication portfolio is a series of deemed fixed interest rate liabilities similar to the core demand deposit replication portfolio.

relating to the CU25 million of the variable interest rate assets. Consequently, if equity holders are expecting a stable return on their investment, this would not be achieved.

- A1.4 Alternatively, the bank could include a deemed fixed interest rate liability within the managed portfolio to reflect the desired fixed interest rate return for the CU25 million of equity. Risk management instruments might then be used to eliminate the interest rate mismatch, protecting the target base return for equity holders. For the statement of financial position in this example, risk management instruments would swap the deemed fixed interest rate position of CU25 million (caused by the target equity return) into variable interest in order to eliminate the interest rate mismatch. The net interest income would then not change in response to changes in the benchmark interest rates.
- A1.5 No actual interest expense would be paid (or recognised in the statement of comprehensive income) with respect to the EMB replication portfolio, but including the EMB within the managed portfolio allows the bank to manage its interest rate risk in such a way that the target base return for equity holders is protected.
- A1.6 This example is simple. In practice, the deemed interest rate risk from the EMB may be included in the managed portfolio through transfer pricing mechanics and would be managed with other exposures as part of dynamic risk management of interest rate risk.
- A1.7 Not all banks include EMBs in their interest rate risk management. However, those that do often use other approaches, especially hedge accounting, as an 'indirect' way to represent the actual risk management based on the EMB. Suppose, in the example in paragraph A1.2, that the bank entered into swaps to pay variable interest and receive fixed interest with a notional amount of CU25 million. The purpose of this dynamic risk management action is to eliminate the 'interest rate mismatch' with respect to the EMB profile. However, since an EMB is not an eligible hedged item in either IFRS 9 or IAS 39, hedge accounting is precluded. The bank may apply cash flow hedge accounting for the cash flow risk on the variable interest rate assets by designating the swap as the hedging instrument with respect to variability in interest rates. This application of hedge accounting is consequently an indirect way to represent dynamic risk management and has two implications.
- A1.8 First, the application of cash flow hedge accounting in the example does not capture the dynamic element of risk management. If all of the assets, liabilities and the EMB are managed together by ALM, it is difficult and artificial to take some of the assets and find many-to-one relationships between them and the swap.
- A1.9 Second, indirect accounting approaches tend to be operationally burdensome because they are not consistent with actual dynamic risk management activities. Implementation is therefore only undertaken for accounting purposes. In reality, the structure of a bank's statement of financial position is complicated and diverse. Furthermore, it changes frequently reflecting its dynamic nature.



This means that banks sometimes struggle to find appropriate hedging relationships. Even if they can be found, frequent discontinuations and redesignations are often necessary.

- A1.10 It is important to note that allowing the EMB to be included as a managed exposure is not a prerequisite for the application of the PRA. Indeed, if the EMB is not considered for dynamic risk management, then applying the PRA to a managed portfolio that does not impute interest rate risk on equity could still provide a useful representation of actual risk management activities.
- A1.11 Accepting the inclusion of EMBs in the PRA would reflect actual risk management in some banks. This is the case when all dynamically managed exposures are considered. This also means that patchwork applications of other indirect accounting approaches can be avoided. Aligning the scope of the PRA with actual dynamic risk management activity should also be operationally simpler. It can also be argued that the conversion of the variable return into the desired fixed return through dynamic risk management is a better reflection of the economics of dynamic risk management. Consequently, if the aim of the PRA is to reflect dynamic risk management in the financial statements, then entities that include the EMB in their dynamic risk management should also consider the EMB when applying the PRA.
- A1.12 However, the revaluation adjustment for EMB arises from items that do not satisfy the definition of assets or liabilities under the *Conceptual Framework for Financial Reporting*. For many users of financial statements, especially the ones that consider the loss absorption function of equity to be important, equity should not result in any revaluation gains or losses being recognised in the financial statements. They also argue that the existing cash flow hedge accounting requirements are adequate without having to revalue equity for the effect of interest rate risk.
- A1.13 The alternative view is that since an indirect way of revaluing EMB is already permitted, through the use of cash flow hedge accounting, it would be inconsistent to prohibit representing this aspect of dynamic risk management directly, while allowing it indirectly.

## A2 Pipeline transactions

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- A2.1 Pipeline transaction is a colloquial expression used to describe the forecast volume of drawdowns of fixed interest rate products at advertised rates. For dynamic risk management purposes, many banks estimate the expected volume of customer balances to be drawn down under the free option on a behaviouralised basis and manage the associated fixed-rate interest rate risk that arises. For example, if a bank advertised a 3-year fixed interest rate mortgage product, the bank would estimate the expected volume to be drawn down, based on previous customer behaviour, the competitiveness of the offered rate and other economic factors. If the estimate was CU500 million, a forward starting CU500 million 3-year fixed interest rate loan could be included in the managed portfolio (essentially in anticipation of drawdowns). If the bank intends to honour the offered fixed interest rate even if it is not legally required to, the forward starting swap allows it to fix the cost for the estimated level of funding,

thereby locking in the net interest income on those pipeline transactions. Under current hedge accounting requirements, an alternative (possibly unrelated) hedged item might be identified in order to achieve hedge accounting indirectly for the IRSs transacted to lock in funding for pipeline transactions.

- A2.2 Conceptual challenges arise when considering the possibility of including pipeline transactions in the PRA. In particular, it can result in recognising gains or losses from future transactions or future business opportunities, which would not be dissimilar conceptually to recognising internally generated goodwill.
- A2.3 Some view pipeline transactions as being similar to constructive obligations. Paragraph 3.62 of the DP on the *Conceptual Framework* states:
- The IASB's preliminary view is that the *Conceptual Framework* should not limit the definition of a liability to obligations that are enforceable by legal or equivalent means. The IASB tentatively favours retaining the existing definition of a liability – which encompasses both legal and constructive obligations – and adding more guidance to help distinguish constructive obligation from economic compulsion.
- A2.4 The IASB's preliminary views set out in the DP on the *Conceptual Framework* show how the IASB is considering distinguishing economic compulsion from constructive obligations. The extract in paragraph A2.3 explores whether constructive obligations satisfy the definition of liabilities, and note that the existence of economic compulsion alone is not enough to satisfy the definition of a liability. However, the boundary between constructive obligations and economic compulsion is not always clear, including in relation to some pipeline transactions. These considerations show that whether pipeline transactions satisfy the definition of constructive obligations depends on facts and circumstances, such as the bank's past behaviour, and the extent to which the bank considers that there is no alternative but to accept the applications once the advertisement is offered.

### **A3 Forecast transactions that are not pipeline transactions**

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- A3.1 Banks may also forecast likely levels of fixed and variable interest rate exposures in the future, in addition to the estimated volume from pipeline transactions discussed in Section A2. However, forecast exposures for which there is no contractual, or even constructive, basis to transact at a fixed interest rate do not attract revaluation risk with respect to changes in interest rate.
- A3.2 When certainty is required as to the interest rate attached to forecast transactions, risk managers may lock in a forward interest rate using derivatives. The risk management objective is to lock in a fixed interest flow; consequently, a cash flow hedge accounting approach would be more suitable if hedge accounting were desired.
- A3.3 Accordingly, this DP suggests that forecast transactions that are not pipeline transactions should not be considered for inclusion in the PRA.

## A4 Exposures

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### A4.1 Non-derivative financial instruments

- A4.1.1 Non-derivative financial instruments, such as fixed interest rate bonds, that are accounted for at fair value through profit or loss (FVTPL) may be included in the managed portfolio. The presentation in the statement of comprehensive income discussed so far on the application of the PRA is for fair value movements to be presented in a new line in the statement of comprehensive income called 'revaluation effect from dynamic risk management' (see Section 6.1). Neither IFRS 9 *Financial Instruments* nor IAS 1 *Presentation of Financial Statements* prescribes where changes in fair value should be presented in profit or loss for instruments classified as FVTPL. Consequently, the question arises whether all fair value changes for non-derivative financial instruments that are considered to be managed exposures for applying the PRA and are accounted for at FVTPL should be presented as a revaluation effect from dynamic risk management. Or, should this presentation only be required for fair value changes due to changes in the managed risk?
- A4.1.2 For example, a bank may buy a corporate bond with the objective of collecting the contractual cash flows, but because of the nature of the cash flows the bond is classified as FVTPL under IFRS 9. The business unit that purchased the bond has responsibility for collecting those contractual cash flows and managing any credit risk, but the interest rate risk is transferred to ALM for dynamic risk management. ALM manages the interest rate risk from the managed portfolio including the bond. Assuming that there were significant changes in the credit risk of the bond (the effect of which will need to be recognised as the instrument is measured at FVTPL), the question is which presentation of that change in fair value due to credit risk provides the most useful information about dynamic risk management activities.
- A4.1.3 The first alternative is to include the change in fair value due to credit risk in the 'revaluation effect from dynamic risk management' line. Arguably, however, such a presentation would be confusing to users of financial statements, because the driver for the revaluation effect is unrelated to the dynamic risk management of the managed risk.
- A4.1.4 The second alternative is to isolate and separately present the fair value changes due to the managed risk, which should result in more representative information on risk management, but has operational implications. This would mean that a separate calculation would be required.
- A4.1.5 A somewhat similar process is included in IFRS 9, which requires changes in fair value of some financial liabilities due to changes in own credit risk be recognised in OCI and not in profit or loss.<sup>43</sup> There is therefore a precedent for splitting fair value changes. However, in deciding on the appropriate accounting for own credit, the IASB noted the complexity of isolating this credit

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<sup>43</sup> Paragraph 5.7.7 of IFRS 9 requires that if financial liabilities are designated at FVTPL under the fair value option, changes in fair value due to own credit should ordinarily be recognised in OCI with limited exceptions.

effect and accordingly sought to make it applicable to only a narrow population. The split of fair value changes under the PRA as discussed has no net impact in profit or loss.<sup>44</sup> Instead, it changes the presentation within profit or loss.

## A4.2 Internal derivatives

- A4.2.1 This Section discusses the role of internal derivatives used for risk management purposes within the PRA (see Section 6.2).
- A4.2.2 Banks usually separate risk management (or ALM) and trading. While they may use similar financial instruments, these two types of operations have very different business purposes. The main aim of a bank's dynamic interest rate risk management is to manage the bank's net interest income from lending and funding (banking book) activities so that the margin responds to a desired extent to changes in interest rates. In contrast, a trading unit has trading profit objectives.
- A4.2.3 As discussed in Section 6.2 a gross presentation of internal derivatives in profit or loss when applying the PRA would present information on dynamic risk management and trading activities separately. Because of the nature of trading book positions, it is not expected to be feasible to isolate the specific external activity undertaken by the trading unit that arises as a consequence of risks transferred from ALM via internal derivatives. Therefore, it is not considered to be operationally feasible for entities to demonstrate actual externalisation of internal derivative transactions.
- A4.2.4 Applying the PRA will not change the net profit or loss impact of internal derivatives. The effect of all internal derivatives will be fully offset in the consolidated profit or loss and eliminated in the statement of financial position.<sup>45</sup>
- A4.2.5 Even when the trading unit does not fully offset the transferred risk with an external counterparty, the existence of internal derivatives facilitates a representation of dynamic risk management activities through the application of the PRA, as illustrated by the following example.
- A4.2.6 Assume that the scope of the application of the PRA of a bank is a focus on dynamic risk management (so all dynamically managed exposures are included in the PRA). A business unit has lent CU100 for three years at a fixed interest rate of 5 per cent to an external customer. ALM provides fixed interest rate funding to the business unit (priced based on the bank's cost of funding), which allows the business unit to lock in their lending margin. ALM in turn is funded with variable interest rate liabilities and so transacts an internal IRS with the trading unit, paying fixed and receiving variable-interest rate for three years on a notional amount of CU100. The trading unit includes the internal swap into its trading position and chooses not to transact any additional external instruments, because it wishes to leave the risk position (receive fixed 3-year

<sup>44</sup> This will not be the case if we consider the alternative approach described in Section 9: the PRA through OCI. If fair value changes are split under this approach, with fair value changes due to the managed risk being recognised in OCI, this will have a net impact in profit or loss.

<sup>45</sup> If the alternative approach—PRA through OCI—is applied, then, as highlighted previously, the effect of internal derivatives would no longer eliminate in the consolidated profit or loss.

interest rate) open with the objective of generating a trading profit. The entity's overall position is an open 3-year fixed interest rate position (they have 3-year fixed interest assets funded by variable interest rate liabilities).

- A4.2.7 ALM considers the interest rate risk from the 3-year fixed interest rate funding provided to the business unit to have been eliminated, because it has been passed on to the trading unit via an internal derivative. Consequently, ALM reflects this dynamic risk management activity in the financial statements by applying the PRA. This would result in a revaluation adjustment for interest rate risk on the external 3-year fixed interest rate customer lending being recognised in profit or loss (possibly represented by the transfer pricing transaction) and being reported as revaluation effect from dynamic risk management activities offset by the fair value changes in the internal derivative that was transacted by ALM. Accruals from the internal derivative would be presented in net interest income from dynamic risk management activity. Consequently, users of the financial statements would see that the interest rate income in the banking book has been stabilised.
- A4.2.8 The fair value movement on the offsetting internal derivative in the trading unit would be reported as 'trading profit or loss', reflecting an open interest rate trading position.
- A4.2.9 The impact of the offsetting internal derivative in both the trading unit and ALM would be offset, leaving only the revaluation adjustment on the external lending in consolidated profit or loss. In addition, the entity's reported actual net interest income would reflect a managed net interest income.
- A4.2.10 Such a presentation could be seen as relevant information that represents how an entity's interest rate risk is managed. It indicates that the trading unit has chosen to retain the receive-fixed interest rate risk as a trading position and that ALM is managing its net interest income.
- A4.2.11 Another entity may have the same original interest rate profile in the banking book, but may not dynamically manage that interest rate risk. Although this entity would have the same external transactions and overall interest rate risk position, the presentation would be very different, with the alternative entity simply accruing the net interest income as required by IFRS 9. Arguably, because of the different models described, users of financial statements may want to be able to distinguish between an entity that dynamically manages risk and separately takes trading positions, and another that does not dynamically manage risk. The application of the PRA would provide users of financial statements with this information. An alternative view may be that there is no economic difference between these two entities, so users of financial statements would expect similar accounting outcomes. In addition, some may question whether it is appropriate that the entity managing its risk exposure should reflect greater volatility in profit or loss.
- A4.2.12 If using the PRA were prohibited in situations in which external risk management instruments had not been transacted, the financial statements would reflect an unhedged margin through variability in net interest income over time, but without any fair value volatility, despite the trading decision to run a net open risk position in respect of interest rates. This would provide a

picture identical to the entity described in paragraph A4.2.11 that has chosen to undertake no dynamic risk management activity, but that has the same net open interest rate risk position.

### **Impact of externalisation requirements**

- A4.2.13 The PRA as outlined in this DP would not require an entity to demonstrate the externalisation of managed risk that is transferred via internal risk management instruments. Nevertheless, because of the concerns about the potential effect on profit or loss, this Section explores the possible consequences of the absence of such externalisation requirements.
- A4.2.14 A prerequisite of hedge accounting under IFRS 9 and IAS 39 is the need to demonstrate the existence of external derivatives as hedging instruments. In situations in which internal derivatives are used for risk management purposes, banks currently apply a variety of practices in order to achieve hedge accounting. These practices include requiring trading units to externalise internal derivatives on a one-to-one basis or subsequently identifying and designating the best (but possibly unrelated) matching external derivative in the trading portfolio. These approaches create operational challenges, either by restricting the normal activities of the trading unit or by requiring additional identification and tracking procedures. Requiring externalisation of risk management instruments under the PRA would impose many of the same accounting driven procedures.
- A4.2.15 An alternative approach would be to require an entity to demonstrate that the risk transferred from ALM through internal derivatives has been substantially transferred to external counterparties in order to apply the gross-up in the profit or loss of internal derivatives on the application of the PRA. The key consideration would be how to determine whether the risks transferred to the trading unit have been substantially externalised or not. There is a variety of ways in which this could be determined and interpreted.
- A4.2.16 The externalisation criterion could be based on an instrument-by-instrument approach, ie identifying an external derivative to match each internal derivative. However, trading units usually transact externally once the risk position that is built up through internal transactions reaches a size that makes an external transaction desirable and economical, and after the offsetting effect of other transactions are taken into account. In addition, a strict instrument-by-instrument approach would not mask any 'round trip' externalisations.<sup>46</sup>
- A4.2.17 Another alternative would be that the risk transferred through internal derivatives is deemed to be substantially externalised, as long as the predefined risk limits (such as trading limits) are not breached. This may better reflect the actual risk management activities, but there would be no consistency between banks as to what those predefined limits should be.

<sup>46</sup> Round trip externalisations in this context are created when external derivatives are transacted to demonstrate externalisation but an additional external derivative with an offsetting effect is also transacted.

- A4.2.18 Guidance could be provided on what ‘substantially’ means in this context. This, however, would create a risk of reliance on bright lines.
- A4.2.19 In addition, if particular criteria to prove an appropriate level of externalisation are required, the question arises as to what the consequences are if the criteria are not met for a particular period. Addressing this issue is likely to introduce additional complexity to the accounting. If revaluation adjustments are not permitted for a particular period following the application of the PRA, amortisation issues will arise, which add operational complexity (as they currently do for hedge accounting).
- A4.2.20 Requiring the disclosure of information on the extent to which risk management derivatives are transacted with external or internal counterparties could be considered if users of financial statements would find that information relevant.

## **A5 Alternative approach—PRA through OCI**

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- A5.1 Section 9 introduces an alternative approach for applying the PRA. Further details on some of the implications of this alternative approach are provided in the following paragraphs.
- A5.2 This possible alternative approach is based on the PRA as discussed throughout this DP. The difference from the PRA as discussed would be that both the revaluation of the managed portfolios with respect to the managed risk and the fair value of risk management instruments would be recognised in OCI rather than in profit or loss.
- A5.3 Even if this use of OCI is thought to provide useful information on dynamic risk management activities, it is not a simple change. Instead, a number of practical and conceptual issues arise.
- A5.4 The PRA through OCI breaks the key assumption that the accounting for risk management instruments would remain unchanged. In addition, for presentation purposes, only the actual net interest income approach could be considered as the PRA through OCI would not be compatible with the stable net interest income presentation, because the profit or loss would always present a perfectly hedged position, which will not always be the case.

### **A5.1 Practical difficulties**

#### **Internal derivatives and the PRA through OCI**

- A5.1.1 Section 6.2 considers whether internal derivatives representing the transfer of risk from ALM to the trading unit should be grossed up in profit or loss on the application of the PRA. Such a treatment might be viewed as providing useful information about the different activities of the two internal business units, ie ALM and trading. A key consideration was that any gross-up of internal derivatives would have no impact on the net profit or loss. However, if the revaluation effect from the dynamic risk management activities were recognised in OCI, then that key consideration would no longer be valid—internal derivatives would affect the reported profit. This is because an internal derivative in the trading unit would still be accounted for at FVTPL, whereas the

corresponding fair value of the internal derivative in ALM would be recognised in OCI. There would be no net impact on the total comprehensive income from the internal derivatives, but there would be an impact on both profit or loss and OCI.

- A5.1.2 Some possible approaches to address the issue of internal derivatives and the PRA through OCI are the following.
- A5.1.3 Approach 1—allow internal derivatives to be grossed up in the statement of comprehensive income on the application of the PRA through OCI, but only if:
- (a) externalisation of internal derivatives by the trading unit has occurred; or
  - (b) 'sufficient' risk is externalised and the level of externalisation is disclosed in the notes to the financial statements.
- A5.1.4 This approach would require some form of tracking and/or satisfaction of requirements by the trading unit. When the IASB discussed the gross treatment of internal derivatives, these suggestions were raised and on balance were discarded as being either too operationally onerous or not being meaningful. Strong evidence as to the viability of any of the approaches would be required to change that conclusion. Alternatively, the benefits of applying OCI in terms of information usefulness would need to be significant to outweigh its operational costs and to result in superior net benefits than the PRA using profit or loss.
- A5.1.5 Approach 2—do not include restrictions and therefore allow internal derivatives to affect profit or loss.
- A5.1.6 Under the PRA through OCI, the information included on the revaluation effect from internal derivatives would net to zero in the total comprehensive income, but the effect on profit or loss and OCI separately would not be zero. Critics of this approach are likely to consider that the information in profit and loss is critical and should not be influenced by internal transactions, regardless of any equal and opposite offset in OCI.
- A5.1.7 Approach 3—do not allow internal derivatives to be grossed up in profit or loss and OCI on the application of the PRA through OCI.
- A5.1.8 The outcome of this approach would be to restrict OCI to risks managed via external derivatives. This would mean that a subset of external derivatives in the trading book would need to be identified as relating to the dynamic risk management activities. The identified external derivatives in that subset would be remeasured at fair value through OCI, unlike other derivatives. Unless risk transferred from ALM via the internal derivative has been fully externalised in the trading book, the revaluation effect from dynamic risk management measured considering only the external derivatives would not represent the actual dynamic risk management activity. This arguably reduces the usefulness of the resulting information in the financial statements about dynamic risk management activities. (The difficulties associated with a focus on externalisation generally are set out in Section A4.2 and are relevant to this discussion.)



### **Sale of managed exposure or close-out of risk management instruments**

- A5.1.9 If the revaluation of the managed exposures and fair value changes in risk management instruments are recognised in OCI, there could be difficulties when they are derecognised prior to maturity. When an exposure included within a managed portfolio or a risk management instrument is derecognised prior to maturity, the carrying value (including the revaluation adjustment for managed exposures) will be derecognised from the statement of financial position and included in the statement of comprehensive income through the gain or loss on derecognition calculation. However, if the revaluation effect (including revaluation amounts to date for the derecognised instrument) were recognised in OCI instead of profit or loss, the need for recycling would arise thereby increasing the operational complexity of the accounting for dynamic risk management. Furthermore, the IASB would need to consider the most appropriate pattern for recycling and the impact that it would have on the reported profit or loss.

### **Non-derivative exposures included in the managed portfolio**

- A5.1.10 Exposures that are accounted for at FVTPL may be included in the managed portfolio. If the revaluation effect from dynamic risk management activities is recognised in OCI, then the IASB would need to consider whether the full fair value change should be recognised in OCI for non-derivative instruments or merely the changes in value due to changes in the managed risk (for example, interest rate risk) should be recognised in OCI.
- A5.1.11 Even if the practical issues identified can be addressed, it is likely that the operational complexity of the PRA through OCI would significantly increase. Consequently, there would need to be evidence of sufficient benefits to warrant that additional complexity.

## A6 Summary of questions for respondents

A6.1 For case of reference the questions set out in the DP are reproduced below.

A6.2 Section 1—Background and introduction to the portfolio revaluation approach (PRA).

**Question 1—Need for an accounting approach for dynamic risk management**

Do you think that there is a need for a specific accounting approach to represent dynamic risk management in entities' financial statements? Why or why not?

**Question 2—Current difficulties in representing dynamic risk management in entities' financial statements**

- (a) Do you think that this DP has correctly identified the main issues that entities currently face when applying the current hedge accounting requirements to dynamic risk management? Why or why not? If not, what additional issues would the IASB need to consider when developing an accounting approach for dynamic risk management?
- (b) Do you think that the PRA would address the issues identified? Why or why not?

A6.3 Section 2—Overview.

**Question 3—Dynamic risk management**

Do you think that the description of dynamic risk management in paragraphs 2.1.1–2.1.2 is accurate and complete? Why or why not? If not, what changes do you suggest, and why?

A6.4 Section 3—The managed portfolio.

**Question 4—Pipeline transactions, EMB and behaviouralisation**

**Pipeline transactions**

- (a) Do you think that pipeline transactions should be included in the PRA if they are considered by an entity as part of its dynamic risk management? Why or why not? Please explain your reasons, taking into consideration operational feasibility, usefulness of the information provided in the financial statements and consistency with the *Conceptual Framework for Financial Reporting* (the *Conceptual Framework*).

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<b>Question 4—Pipeline transactions, EMB and behaviouralisation</b>	
<b>EMB</b>	
(b)	Do you think that EMB should be included in the PRA if it is considered by an entity as part of its dynamic risk management? Why or why not? Please explain your reasons, taking into consideration operational feasibility, usefulness of the information provided in the financial statements and consistency with the <i>Conceptual Framework</i> .
<b>Behaviouralisation</b>	
(c)	For the purposes of applying the PRA, should the cash flows be based on a behaviouralised rather than on a contractual basis (for example, after considering prepayment expectations), when the risk is managed on a behaviouralised basis? Please explain your reasons, taking into consideration operational feasibility, usefulness of the information provided in the financial statements and consistency with the <i>Conceptual Framework</i> .

<b>Question 5—Prepayment risk</b>
When risk management instruments with optionality are used to manage prepayment risk as part of dynamic risk management, how do you think the PRA should consider this dynamic risk management activity? Please explain your reasons.

<b>Question 6—Recognition of changes in customer behaviour</b>
Do you think that the impact of changes in past assumptions of customer behaviour captured in the cash flow profile of behaviouralised portfolios should be recognised in profit or loss through the application of the PRA when and to the extent they occur? Why or why not?

<b>Question 7—Bottom layers and proportions of managed exposures</b>
If a bottom layer or a proportion approach is taken for dynamic risk management purposes, do you think that it should be permitted or required within the PRA? Why or why not? If yes, how would you suggest overcoming the conceptual and operational difficulties identified? Please explain your reasons.

<b>Question 8—Risk limits</b>
Do you think that risk limits should be reflected in the application of the PRA? Why or why not?

**Question 9—Core demand deposits**

- (a) Do you think that core demand deposits should be included in the managed portfolio on a behaviouralised basis when applying the PRA if that is how an entity would consider them for dynamic risk management purposes? Why or why not?
- (b) Do you think that guidance would be necessary for entities to determine the behaviouralised profile of core demand deposits? Why or why not?

**Question 10—Sub-benchmark rate managed risk instruments**

- (a) Do you think that sub-benchmark instruments should be included within the managed portfolio as benchmark instruments if it is consistent with an entity's dynamic risk management approach (ie Approach 3 in Section 3.10)? Why or why not? If not, do you think that the alternatives presented in the DP (ie Approaches 1 and 2 in Section 3.10) for calculating the revaluation adjustment for sub-benchmark instruments provide an appropriate reflection of the risk attached to sub-benchmark instruments? Why or why not?
- (b) If sub-benchmark variable interest rate financial instruments have an embedded floor that is not included in dynamic risk management because it remains with the business unit, do you think that it is appropriate not to reflect the floor within the managed portfolio? Why or why not?

A6.5 Section 4—Revaluing the managed portfolio.

**Question 11—Revaluation of the managed exposures**

- (a) Do you think that the revaluation calculations outlined in this Section provide a faithful representation of dynamic risk management? Why or why not?
- (b) When the dynamic risk management objective is to manage net interest income with respect to the funding curve of a bank, do you think that it is appropriate for the managed risk to be the funding rate? Why or why not? If not, what changes do you suggest, and why?

**Question 12—Transfer pricing transactions**

- (a) Do you think that transfer pricing transactions would provide a good representation of the managed risk in the managed portfolio for the purposes of applying the PRA? To what extent do you think that the risk transferred to ALM via transfer pricing is representative of the risk that exists in the managed portfolio (see paragraphs 4.2.23–4.2.24)?
- (b) If the managed risk is a funding rate and is represented via transfer pricing transactions, which of the approaches discussed in paragraph 4.2.21 do you think provides the most faithful representation of dynamic risk management? If you consider none of the approaches to be appropriate, what alternatives do you suggest? In your answer please consider both representational faithfulness and operational feasibility.
- (c) Do you think restrictions are required on the eligibility of the indexes and spreads that can be used in transfer pricing as a basis for applying the PRA? Why or why not? If not, what changes do you recommend, and why?
- (d) If transfer pricing were to be used as a practical expedient, how would you resolve the issues identified in paragraphs 4.3.1–4.3.4 concerning ongoing linkage?

**Question 13—Selection of funding index**

- (a) Do you think that it is acceptable to identify a single funding index for all managed portfolios if funding is based on more than one funding index? Why or why not? If yes, please explain the circumstances under which this would be appropriate.
- (b) Do you think that criteria for selecting a suitable funding index or indexes are necessary? Why or why not? If yes, what would those criteria be, and why?

**Question 14—Pricing index**

- (a) Please provide one or more example(s) of dynamic risk management undertaken for portfolios with respect to a pricing index.
- (b) How is the pricing index determined for these portfolios? Do you think that this pricing index would be an appropriate basis for applying the PRA if used in dynamic risk management? Why or why not? If not, what criteria should be required? Please explain your reasons.
- (c) Do you think that the application of the PRA would provide useful information about these dynamic risk management activities when the pricing index is used in dynamic risk management? Why or why not?

A6.6

Section 5—Scope.

**Question 15—Scope**

- (a) Do you think that the PRA should be applied to all managed portfolios included in an entity's dynamic risk management (ie a scope focused on dynamic risk management) or should it be restricted to circumstances in which an entity has undertaken risk mitigation through hedging (ie a scope focused on risk mitigation)? Why or why not? If you do not agree with either of these alternatives, what do you suggest, and why?
- (b) Please provide comments on the usefulness of the information that would result from the application of the PRA under each scope alternative. Do you think that a combination of the PRA limited to risk mitigation and the hedge accounting requirements in IFRS 9 would provide a faithful representation of dynamic risk management? Why or why not?
- (c) Please provide comments on the operational feasibility of applying the PRA for each of the scope alternatives. In the case of a scope focused on risk mitigation, how could the need for frequent changes to the identified hedged sub-portfolio and/or proportion be accommodated?
- (d) Would the answers provided in questions (a)–(c) change when considering risks other than interest rate risk (for example, commodity price risk, FX risk)? If yes, how would those answers change, and why? If not, why not?

**Question 16—Mandatory or optional application of the PRA**

- (a) Do you think that the application of the PRA should be mandatory if the scope of application of the PRA were focused on dynamic risk management? Why or why not?
- (b) Do you think that the application of the PRA should be mandatory if the scope of the application of the PRA were focused on risk mitigation? Why or why not?

**Question 17—Other eligibility criteria**

- (a) Do you think that if the scope of the application of the PRA were focused on dynamic risk management, then no additional criterion would be required to qualify for applying the PRA? Why or why not?
  - (i) Would your answer change depending on whether the application of the PRA was mandatory or not? Please explain your reasons.
  - (ii) If the application of the PRA were optional, but with a focus on dynamic risk management, what criteria regarding starting and stopping the application of the PRA would you propose? Please explain your reasons.
- (b) Do you think that if the scope of the application of the PRA were to be focused on risk mitigation, additional eligibility criteria would be needed regarding what is considered as risk mitigation through hedging under dynamic risk management? Why or why not? If your answer is yes, please explain what eligibility criteria you would suggest and, why.
  - (i) Would your answer change depending on whether the application of the PRA was mandatory or not? Please explain your reasons.
  - (ii) If the application of the PRA were optional, but with a focus on risk mitigation, what criteria regarding starting and stopping the application of the PRA would you propose? Please explain your reasons.

A6.7 Section 6—Presentation and disclosures.

**Question 18—Presentation alternatives**

- (a) Which presentation alternative would you prefer in the statement of financial position, and why?
- (b) Which presentation alternative would you prefer in the statement of comprehensive income, and why?
- (c) Please provide details of any alternative presentation in the statement of financial position and/or in the statement of comprehensive income that you think would result in a better representation of dynamic risk management activities. Please explain why you prefer this presentation taking into consideration the usefulness of the information and operational feasibility.

**Question 19—Presentation of internal derivatives**

- (a) If an entity uses internal derivatives as part of its dynamic risk management, the DP considers whether they should be eligible for inclusion in the application of the PRA. This would lead to a gross presentation of internal derivatives in the statement of comprehensive income. Do you think that a gross presentation enhances the usefulness of information provided on an entity's dynamic risk management and trading activities? Why or why not?
- (b) Do you think that the described treatment of internal derivatives enhances the operational feasibility of the PRA? Why or why not?
- (c) Do you think that additional conditions should be required in order for internal derivatives to be included in the application of the PRA? If yes, which ones, and why?

**Question 20—Disclosures**

- (a) Do you think that each of the four identified themes would provide useful information on dynamic risk management? For each theme, please explain the reasons for your views.
- (b) If you think that an identified theme would not provide useful information, please identify that theme and explain why.
- (c) What additional disclosures, if any, do you think would result in useful information about an entity's dynamic risk management? Please explain why you think these disclosures would be useful.



<b>Question 21—Scope of disclosures</b>	
(a)	Do you think that the scope of the disclosures should be the same as the scope of the application of the PRA? Why or why not?
(b)	If you do not think that the scope of the disclosures should be the same as the scope of the application of the PRA, what do you think would be an appropriate scope for the disclosures, and why?

A6.8 Section 7—Other considerations.

<b>Question 22—Date of inclusion of exposures in a managed portfolio</b>	
Do you think that the PRA should allow for the inclusion of exposures in the managed portfolios after an entity first becomes a party to a contract? Why or why not?	
(a)	If yes, under which circumstances do you think it would be appropriate, and why?
(b)	How would you propose to account for any non-zero Day 1 revaluations? Please explain your reasons and comment on any operational implications.

<b>Question 23—Removal of exposures from a managed portfolio</b>	
(a)	Do you agree with the criterion that once exposures are included within a managed portfolio they should remain there until derecognition? Why or why not?
(b)	Are there any circumstances, other than those considered in this DP, under which you think it would be appropriate to remove exposures from a managed portfolio? If yes, what would those circumstances be and why would it be appropriate to remove them from the managed portfolio?
(c)	If exposures are removed from a managed portfolio prior to maturity, how would you propose to account for the recognised revaluation adjustment, and why? Please explain your reasons, including commenting on the usefulness of information provided to users of financial statements.

**Question 24—Dynamic risk management of foreign currency instruments**

- (a) Do you think that it is possible to apply the PRA to the dynamic risk management of FX risk in conjunction with interest rate risk that is being dynamically managed?
- (b) Please provide an overview of such a dynamic risk management approach and how the PRA could be applied or the reasons why it could not.

A6.9 Section 8—Application of the PRA to other risks.

**Question 25—Application of the PRA to other risks**

- (a) Should the PRA be available for dynamic risk management other than banks' dynamic interest rate risk management? Why or why not? If yes, for which additional fact patterns do you think it would be appropriate? Please explain your fact patterns.
- (b) For each fact pattern in (a), please explain whether and how the PRA could be applied and whether it would provide useful information about dynamic risk management in entities' financial statements.

A6.10 Section 9—Alternative approach—PRA through other comprehensive income.

**Question 26—PRA through OCI**

Do you think that an approach incorporating the use of OCI in the manner described in paragraphs 9.1–9.8 should be considered? Why or why not? If you think the use of OCI should be incorporated in the PRA, how could the conceptual and practical difficulties identified with this alternative approach be overcome?

## A7 Glossary

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<b>Clean fair value</b>	The fair value of a risk management instrument excluding the interest accrual for the most recent interest rate fixing.
<b>Clean revaluation</b>	The revaluation adjustment arising from the application of the PRA excluding the interest accrual for the most recent interest rate fixing.
<b>Core demand deposits</b>	It is common for depositors to maintain demand deposit accounts with banks for significant periods of time. Knowing this sticky nature of customer behaviour, banks usually identify a part of the demand deposit portfolio that is deemed to attract fixed interest rate risk, and replicate it as a term liability for dynamic risk management purposes. These are known as <b>core demand deposits</b> .
<b>Equity model book (EMB)</b>	Some banks disaggregate the return on equity into a base return similar to an interest rate (ie compensation to equity holders for providing funding) and a residual return for net income over and above the base return and incorporate capital management objectives into their overall dynamic risk management. In an interest rate risk context, this is colloquially referred to as an <b>equity model book</b> . When applying this approach, the base return aspect of capital is typically replicated as a fixed interest rate risk profile, which is then included in dynamic interest rate risk management.
<b>Internal derivatives</b>	Derivatives that are entered into between business units within a consolidated group.
<b>Managed exposure</b>	Exposure to a specific risk (for example, interest rate risk) that an entity manages dynamically. This DP considers financial assets, financial liabilities and firm commitments as eligible <b>managed exposures</b> in the context of dynamic interest rate risk management. The DP discusses whether <b>pipeline transactions</b> and <b>EMB</b> could be considered as managed exposures or not.
<b>Managed portfolio</b>	Two or more managed exposures that are risk managed on a portfolio basis. <b>Managed portfolios</b> are usually <b>open portfolios</b> .
<b>Managed risk</b>	A specific risk that an entity manages through its dynamic risk management activities.
<b>Net open risk position</b>	The net position arising from long and short <b>managed exposures</b> within a <b>managed portfolio</b> .
<b>Open portfolio</b>	A portfolio that is made up of <b>managed exposures</b> that change over time because of additions and removals of managed exposures. An example is a loan portfolio in banks with new loans being added and existing loans maturing or being prepaid over time.

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<b>Pipeline transactions</b>	A colloquial expression that refers to the forecast issue of fixed interest rate products at advertised interest rates.
<b>Replication portfolio</b>	A deemed portfolio that is created to capture the specific characteristics of a portfolio of financial instruments or equity based on behaviouralised rather than contractual terms. Examples are core <b>demand deposits</b> and <b>EMB</b> .
<b>Risk limits</b>	<b>Risk limits</b> are thresholds set for risk levels that entities (for example, banks) are willing to tolerate, ie levels that they can accept without seeking risk mitigation through hedging.
<b>Risk management instruments</b>	Derivative instruments that are used to mitigate the <b>managed risk</b> arising from <b>net open risk positions</b> .
<b>Sensitivity analysis</b>	A risk management technique that measures the valuation change for risk exposures (for example, interest rate exposures). For instance, banks apply <b>sensitivity analysis</b> to measure value changes in assets (loans and securities), liabilities (deposits) and derivatives that would materialise if the benchmark interest rate yield curve shifts by 10 basis points (= 0.1%).
<b>Sub-benchmark rate</b>	An interest rate that is below the benchmark index. For instance, if the market considers a bank to be more creditworthy than its peers, the bank may be able to attract funding while paying a rate equal to a benchmark index less a margin. In a LIBOR environment this is known as 'sub-LIBOR'.
<b>Swaptions</b>	Options to start swaps at a pre-agreed rate and at a pre-agreed date. Banks sometimes use <b>swaptions</b> to hedge against prepayment options embedded in financial products, such as prepayment of mortgages by customers.
<b>Transfer prices</b>	Prices that entities (for example, banks) internally use when different business units transfer funds and risks between them.

