



# **IASB Discussion Paper (DP/2014/1)**

## **”Accounting for Dynamic Risk Management – A Portfolio Revaluation Approach to Macro Hedging”**

Dr Jan-Velten Große

**Public Discussion**

Frankfurt am Main, 6 June 2014



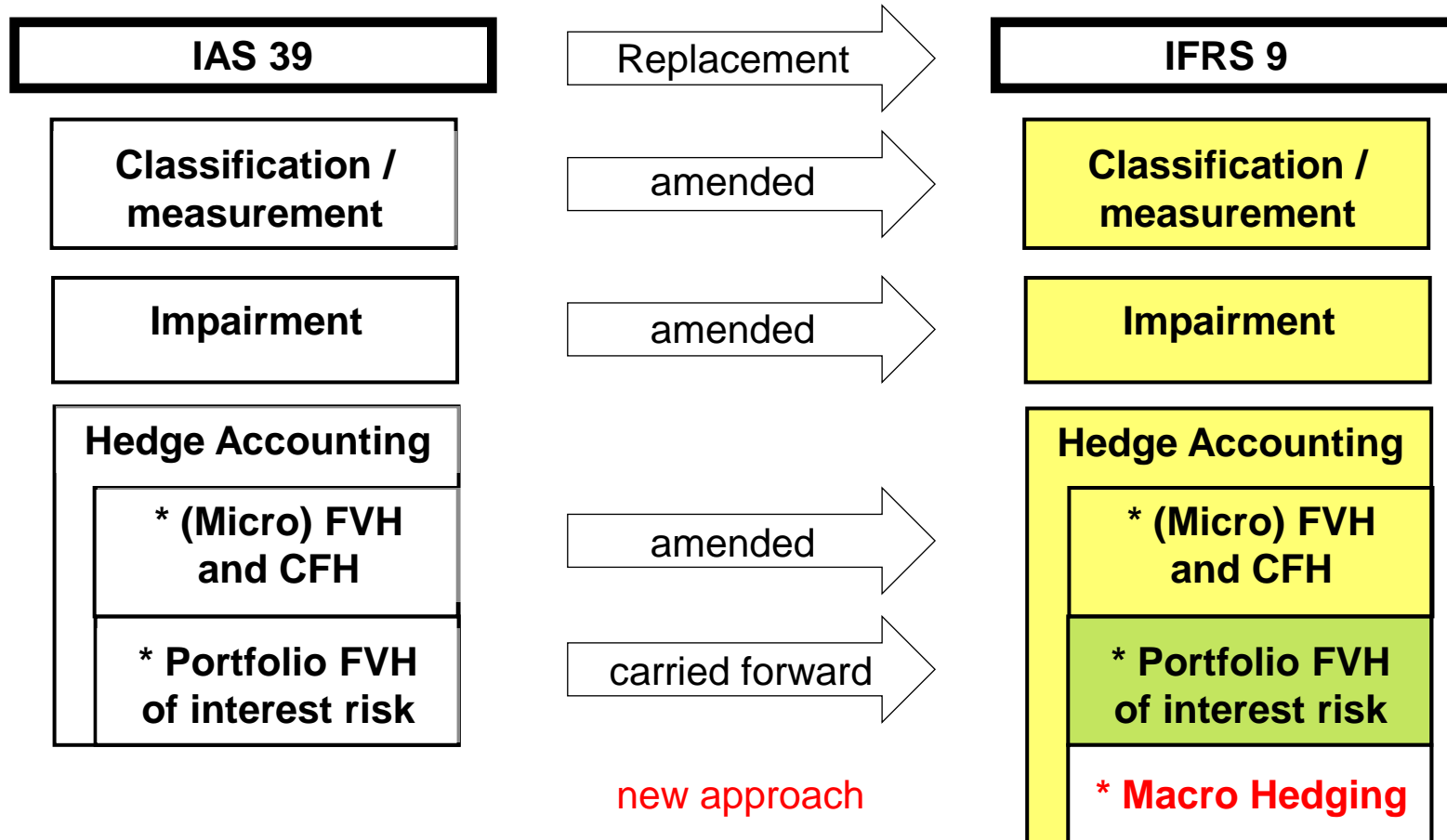
# Content

1. Introduction and background
2. “Portfolio Revaluation Approach” – Overview
3. Application to other risks
4. Scope
5. Alternative approaches
6. The managed portfolio (in detail)
7. Revaluing the managed portfolio (in detail)
8. Presentation and disclosures
9. Other considerations



# 1. Introduction and background (1/4)

## The IASB project





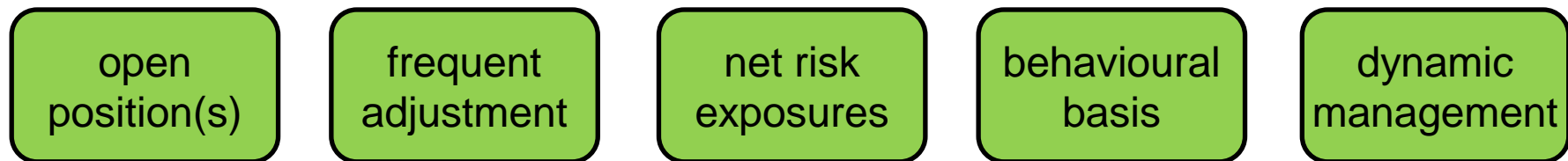
# 1. Introduction and background (2/4)

## Issue and objective (IN / Sec. 1)

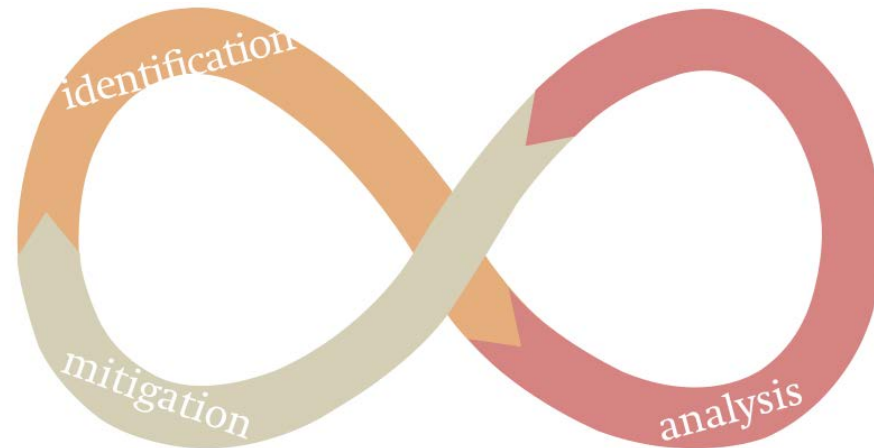
- Issue:
    - Mixed measurement model → accounting anomalies / mismatches
    - (General) hedge accounting as a limited solution
    - Portfolio Revaluation Approach (PRA) in addition to hedge accounting
  - Objective:
    - *PRA ... aims to better reflect dynamic risk management in ... financial statements (IN 2)*
    - *PRA is to provide a faithful representation of ... dynamic risk management activities (1.29)*
- **Issue vs. objective ???**

# 1. Introduction and background (3/4)

## What is “dynamic risk management“? (Sec. 1 / 2.1)



- Elements of risk management:
  - risk identification
  - + risk analysis
  - + risk mitigation



(chart – source: IASB)



# 1. Introduction and background (4/4)

## The discussion paper (DP)

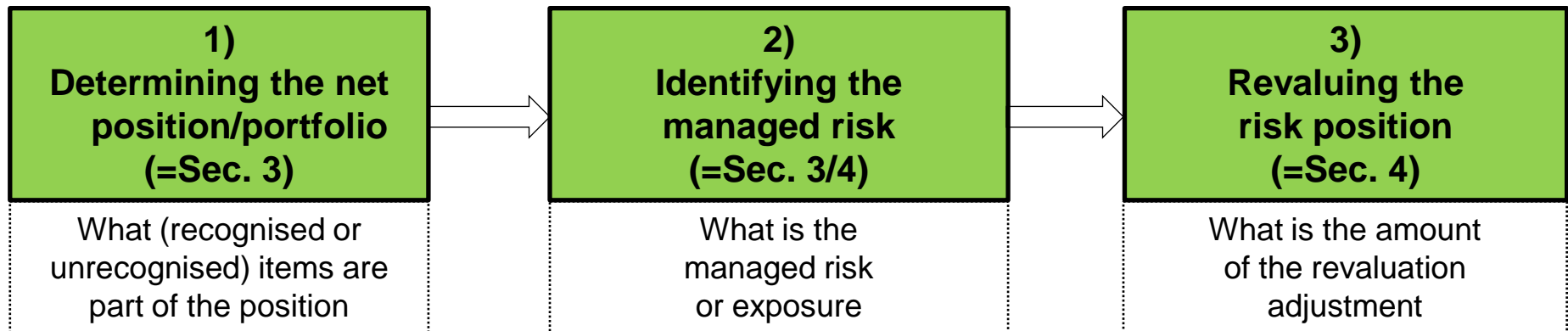
- First publication within this IASB-only project
  - Publication: 17 April 2014
  - Comment deadline: 17 October 2014
- Focus: interest rate risk, banking sector
- DP means:
  - Brand new accounting model
  - Comprehensive proposals
  - Alternatives and variations (often no preference yet)
  - Extensive explanations
  - Feedback sought on broader range → 26 questions
- Next step: Exposure Draft, comprising other risks and other sectors



## 2. Overview (1/5)

### The “Portfolio Revaluation Approach“ (PRA) (Sec. 1 / 2.2)

The PRA would **revalue** the ... **net open risk position(s)** ... for the changes in the **risk(s) ... being dynamically managed** (1.29)



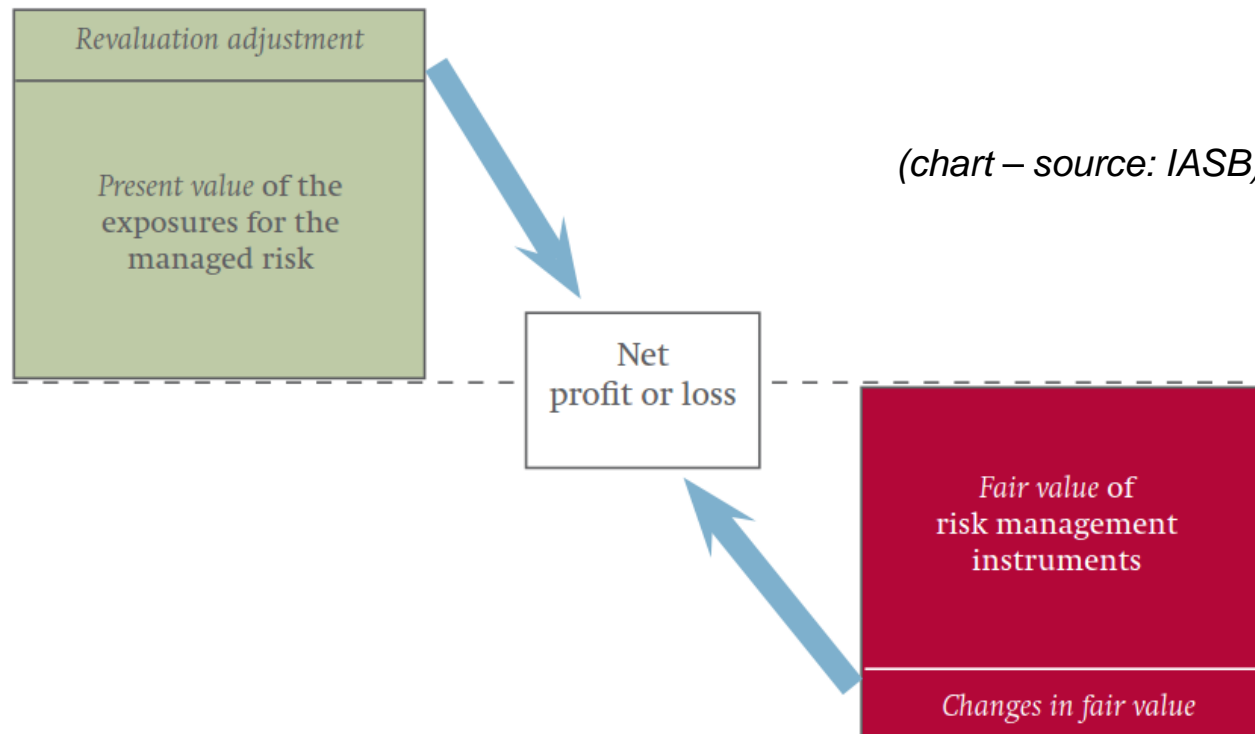
- Only pre-condition: existing dynamic risk management (DRM)
- But not necessarily: full economic risk mitigation



## 2. Overview (2/5)

### Aim of the Revaluation

- **Revaluation = measuring the managed risk of the net risk position**
- „Revaluation“ of the net risk position → offset with hedging instruments

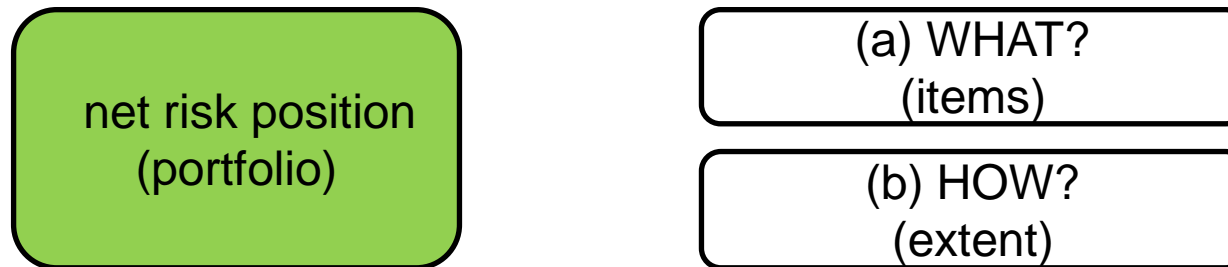




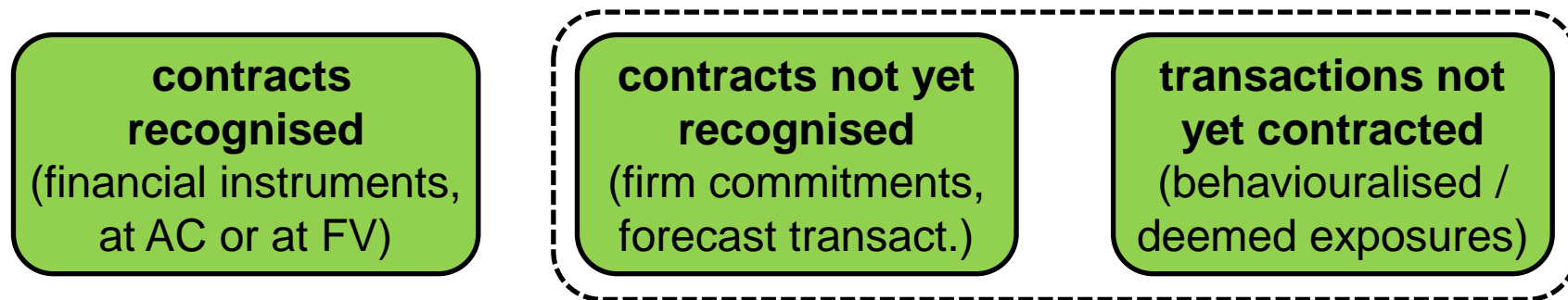
## 2. Overview (3/5)

### 1) Determining the portfolio / net risk position (Sec. 3)

- What can / shall be included in the net position?



- (a) WHAT “*exposures*“ / “*items*“ shall be included?



→ DP not very explicit → discussion of specific examples



## 2. Overview (4/5)

### 2) Identifying the managed risk (Sec. 3 / 4.1)

(b) HOW shall these items be included?

- Behaviouralisation = incorporating expected behaviour
- Prepayment risk = incorporating prepayment behaviour
- Bottom Layers / Proportions = partial exposure (ignoring the full exposure)
- Risk limits = incorporating “accepted“ risk level
- Core demand deposits = behave like fixed interest exposure in a time frame
- Sub-benchmark risks = considered as one-sided or capped risk (embedded floor)

**→ DP not systematic → simple list of relevant special issues**



## 2. Overview (5/5)

### 3) Revaluing the risk position (Sec. 4.1)

- **Revaluation = measuring the managed risk of the net risk position**

„The revaluation would be determined by managed risk“ (4.1.1)

- Revaluation as a present value method

„The revaluation ... is determined using present value techniques ... The cashflows to be discounted and the discount rates... be identified with reference to managed risk“ (4.1.1)

- Determining the revaluation adjustment:

- **Cash flows**: based on current interest rate (curves), incorporating expectations (“with reference to managed risk“, i.e. no liquidity or credit spread)
- **Discount rate**: current interest rate (curves), always updated



### 3. Application to other risks (1/2)

#### Characteristics for interest rate risk management (Sec. 8)

- Interest rate risks/banks as a “well-known and documented example”
  - PRA potentially applicable to other risks/industries
- Typical characteristics
  - Aggregation of a net position / portfolio
  - Management of the net interest income → target margin or sensitivity
  - centralised risk management
  - Incorporation of expectations / behaviour
  - management may lead to partial hedging (mitigation) only

#### Applicability to other risks/industries?

- Assumption: similarities between interest, or FX or commodity risk management
- For **discussion**: PRA applicable and/or needed for DRM of other risks?



### 3. Application to other risks (2/2)

#### Foreign currency and commodity risk (Sec. 8)

- **PRA potentially applicable** if
    - Management by risk (only FX or commodity, no other factors)
    - Management of a **net position** from purchases and sales (or inventory)
    - Stabilising of a net (target) **yield or margin or spread**
  - **but: differences exist**
    - Hedged proportion varies with time horizon → potential volatility
    - Purchases/sales with potentially different sensitivity (location, quality etc.)
    - DRM on a full FV basis → FV option rather than PRA
    - Risk management/valuation tools less complex
- **Still open whether PRA applicable to FX and commodity risk**



## 4. Scope (1/2)

### Focus of the PRA (Sec. 5.1 / 5.2)

- „Scope“ = application of the PRA (not: items in the net position)
- Two alternatives for discussion:

overall net open risk position(s)  
**subject to DRM activities**

part of net open risk position(s)  
**subject to risk mitigation**

focus: dynamic risk management

focus: risk mitigation (hedging)

*„apply to all elements of dynamic risk management activities“*

*„apply only to those circumstances in which hedging is undertaken“*

*„only when all three elements of DRM are undertaken“*

(a) sub-portfolio OR (b) proportion



## 4. Scope (2/2)

### Mandatory or optional (Sec. 5.3)

- PRA application **for discussion**: mandatory or optional
- Knock-on effects on “general hedge accounting“ (which is optional)

	PRA is optional	PRA is mandatory
Overall	<ul style="list-style-type: none"> <li>• more arbitrary</li> <li>• tracking and amortisation requirements</li> </ul>	<ul style="list-style-type: none"> <li>• precise DRM definition required</li> <li>• less arbitrary</li> </ul>
Scope of the PRA		<ul style="list-style-type: none"> <li>• if focus on <i>Risk Mitigation</i> → implicit options</li> <li>• if focus on <i>DRM</i> → more knock-on effects on hedge accounting</li> </ul>
Knock-on effect on hedge accounting	<ul style="list-style-type: none"> <li>• comprehensive tool kit → mitigation volatility is the focus</li> <li>• reduced comparability</li> </ul>	<ul style="list-style-type: none"> <li>• hedge accounting potentially restricted</li> </ul>



## 5. Alternative approaches (1/2)

### Alternative approach: PRA through OCI (Sec. 9 / A5)

- One alternative approach **for discussion**
- Idea: PRA as proposed, but presentation of the net effect in OCI
  - Revaluation adjustment of the risk position and
  - Fair value changes of all risk management derivatives
- **Challenges:**
  - Derivatives: principle of measuring all derivatives at FV
  - Internal derivatives: net effect in P&L, since full FV in the trading book
  - Aim and purpose of the OCI: still unclear
  - Recycling issue if early derecognition
  - Non-derivatives at FVPL as part of the risk position: presenting in OCI all measurement changes or only risk-specific adjustments





## 5. Alternative approaches (2/2)

### Approaches considered and dismissed (Sec. 1)

- Two alternatives discussed during the project, but **already dismissed**
  - No feedback required

#### (1) **Accrual Accounting** (1.24):

- Risk management derivatives at AC or accrual of FV changes
- No direct P&L effect
- Dismissed → DRM looks “perfect“, regardless of whether being so

#### (2) **Full Fair Value Accounting** (1.25):

- Managed risk position measured at full fair value
- Dismissed → no difference between managed and unmanaged risk → thus, no reflectation of the DRM



## 6. The managed portfolio (1/8)

### Basis for determining the portfolio / net risk position (Sec. 3)

(a) WHAT “*exposures*“ / “*items*“ shall be included?

**contracts  
recognised**  
(financial instruments,  
at AC or at FV)

**contracts not yet  
recognised**  
(firm commitments,  
forecast transact.)

**transactions not  
yet contracted**  
(behaviouralised /  
deemed exposures)

(b) HOW shall these items be included?

- Behaviouralisation = incorporating expected behaviour
- Prepayment risk = incorporating prepayment behaviour
- Bottom Layers / Proportions = partial exposure (ignoring the full exposure)
- Risk limits = incorporating “accepted“ risk level
- Core demand deposits = behave like fixed interest exposure in a time frame
- Sub-benchmark risk = one-sided or capped risk (embedded floor)



## 6. The managed portfolio (2/8)

### Pipeline Transactions (Sec. 3.2 / A2)

- **Term for forecast volumes / deemed transactions**
- Proposal **for discussion**: incorporating them in the net risk position
- Represent expected risk exposures with the following characteristics:
  - No contractual commitment yet, but sort of “compulsion“
  - Probability not relevant
  - Similar to short-term free put option
- Estimation of volumes, time, and risk exposure (e.g. interest rate)
- **Remaining issues:**
  - “Economic compulsion“? Distinct from “constructive obligations“?
  - Definition of a liability?
  - Different from „forecast transactions“?



## 6. The managed portfolio (3/8)

### Equity Model Book (Sec. 3.3 / A1)

- **Replication portfolio for managing the deemed equity compensation**
- Proposal **for discussion**: incorporating it in the net risk position
- Assumption of the following risk management activity:
  - “Target compensation“ needed to satisfy equity holders
  - “interest“ return on equity = base return + residual return
  - Base return (=target compensation) = deemed fixed interest rate liability
  - Using a replication portfolio for modelling equity compensation
  - DRM takes into account such compensation
- **Remaining issues:**
  - Implicit measurement of equity → appropriate?
  - Artificial presentation of this DRM activity → constraints of the PRA?



## 6. The managed portfolio (4/8)

### Behaviouralisation / Prepayments (Sec. 3.4 / 3.5 / 3.6)

- Behaviouralisation = considering expected behaviour, e.g.
  - Prepayments = payments earlier than maturity
  - Core demand deposits = stable amount of deposits/accounts
  - Idea: using behavioural rather than expected cash flows
- Prepayments = payments earlier than maturity
  - Specific case for behavioural expectations
  - Prepayment option influenced by interest rate development
  - Management = protect from downside changes → *one-sided risk hedge*
- **Remaining issues:**
  - Mixed portfolio with/without optional components?
  - When shall changes in (behavioural) expectations be considered?



## 6. The managed portfolio (5/8)

### Core Demand Deposits (Sec. 3.9)

- Specific case for behavioural expectations
- Risk management separate from other *demand deposits/accounts*
- Core demand deposits = stable amount of deposits/accounts:
  - Considered as fixed rate funding (assumption: low fixed rate)
  - “Stable“ position (assumption for amount and timing) → similar to a series of short-term fixed rate funding
  - Incorporation into DRM → actually fixing of a margin



## 6. The managed portfolio (6/8)

### Bottom Layers / Proportions (Sec. 3.7)

- Specification of the case of prepayments
  - Idea: PRA applies to only a portion of the portfolio → which portion?
  - Interpretation of risk management
    - Bottom layer = “bottom“ portion of a total risk position
    - Proportion = “unspecified“ portion (percentage) of a total risk position
  - **Remaining issues:**
    - Which interpretation is appropriate (if any)?
    - Tracking and amortisation requirements?
    - If inhomogenous portfolio → measuring revaluation amount?
- **IASB: PRA for the total risk position more appropriate (otherwise prepayment risk is partially ignored) and less complex**



## 6. The managed portfolio (7/8)

### Risk Limits (Sec. 3.8)

- Idea: risk limits incorporated as accepted risk level
  - Risk limits suggest:
    - No hedging (mitigation) as long as risk limit not touched
    - DRM “successful“ as long as risk limit not touched
  - Incorporation into the PRA:
    - No P&L volatility → no revaluation as long as risk limit is not touched
  - **Remaining issues:**
    - Counter-intuitive: the wider the risk limit, the less P/L volatility
    - Implementation as a conceptual challenge
- **IASB: little support for incorporating risk limits**



## 6. The managed portfolio (8/8)

### Sub-Benchmark Risks (Sec. 3.10)

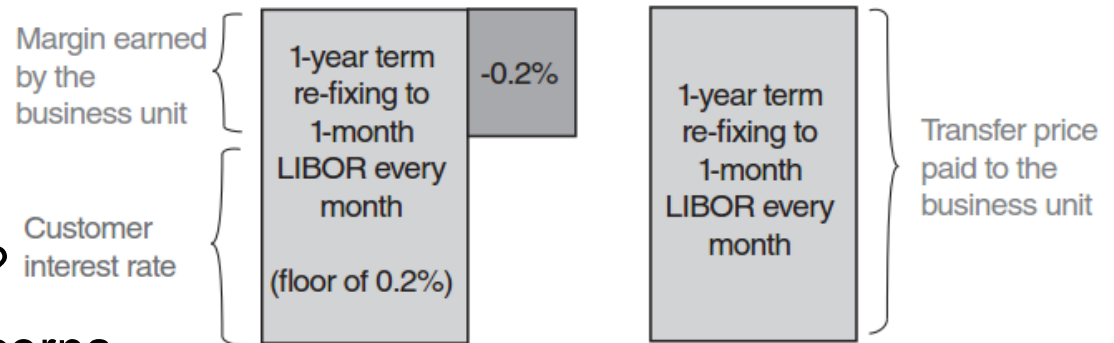
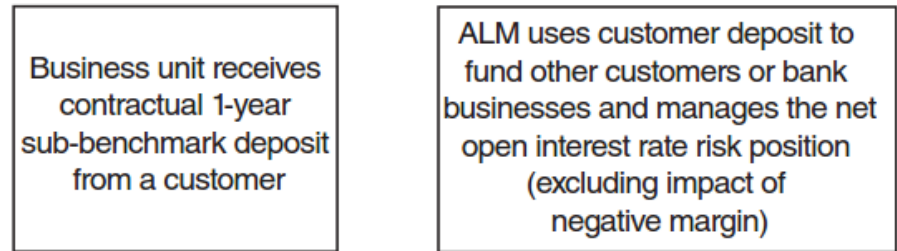
- **For discussion:** PRA applied to benchmark risk or sub-benchmark risk?

- Particularities:

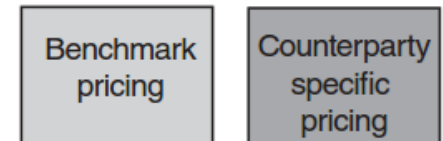
- negative margin not part of the transfer price
- negative margin as an implicit floor

- **Remaining issues:**

- Is floor relevant for PRA?
- Are sub-benchmark concerns under IFRS 9 relevant for PRA?



(chart – source: IASB)





## 7. Revaluing the managed portfolio (1/4)

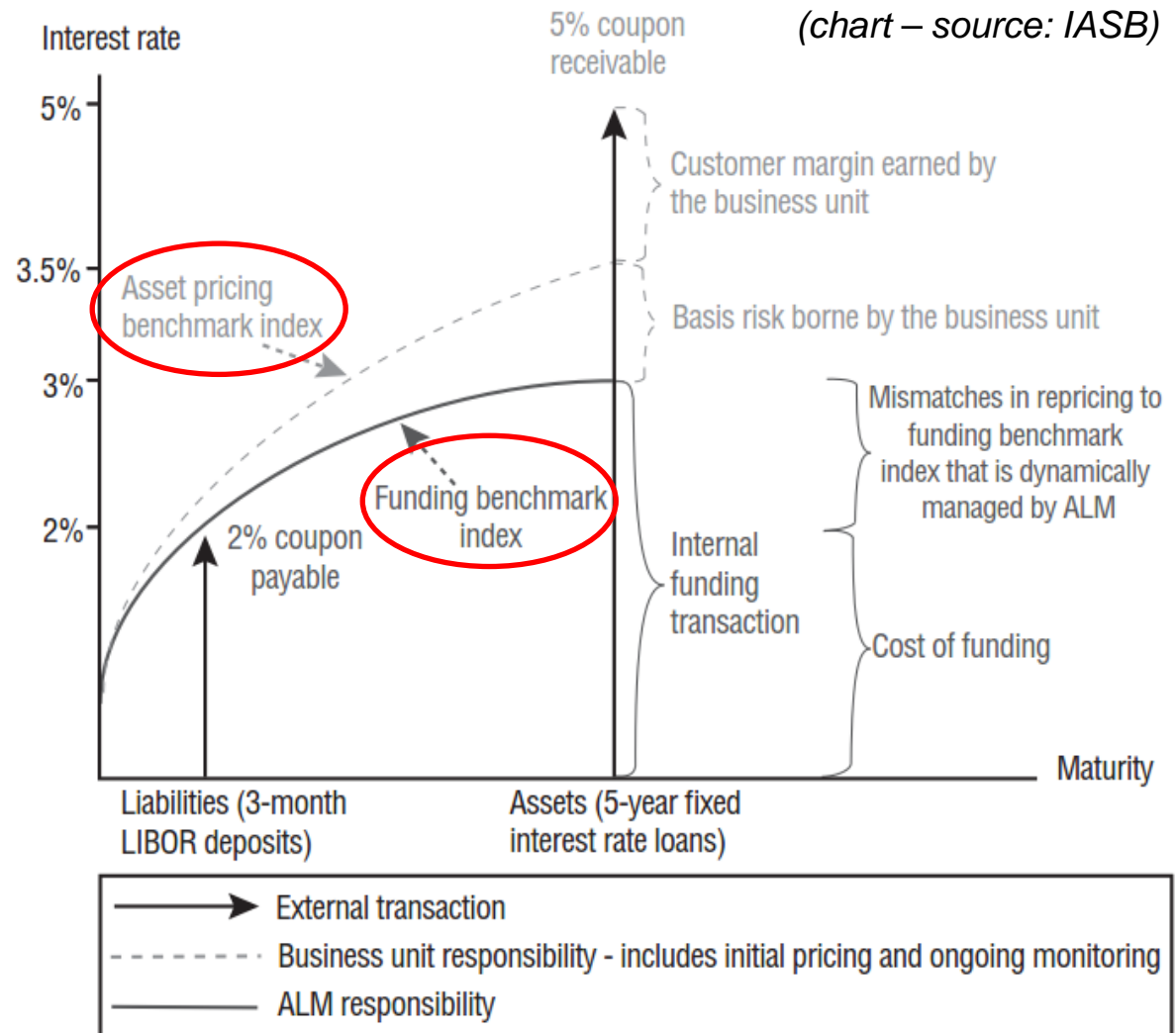
### Cash flows and discounting (Sec. 4.1)

- **Revaluation = measuring the managed risk of the net risk position**
  - “*The revaluation ... be determined by managed risk*“ (4.1.1)
- Revaluation as a present value method
  - “*The revaluation ... is determined using present value techniques ... The cashflows to be discounted and the discount rates... be identified with reference to managed risk*“ (4.1.1)
- Determining the revaluation adjustment:
  - **Cash flows**: based on current interest rate (curves), incorporating expectations (“with reference to managed risk“, i.e. no liquidity or credit spread)
  - **Discount rate**: current interest rate (curves), always updated

## 7. Revaluing the managed portfolio (2/4)

### Cash flows and discounting (Sec. 4.1)

- **Remaining issues:**
    - Which rate determines cash flow amounts?
    - Which rate determines discount rate?
- “*identification of managed risk is critical*“ (4.1.2(c))



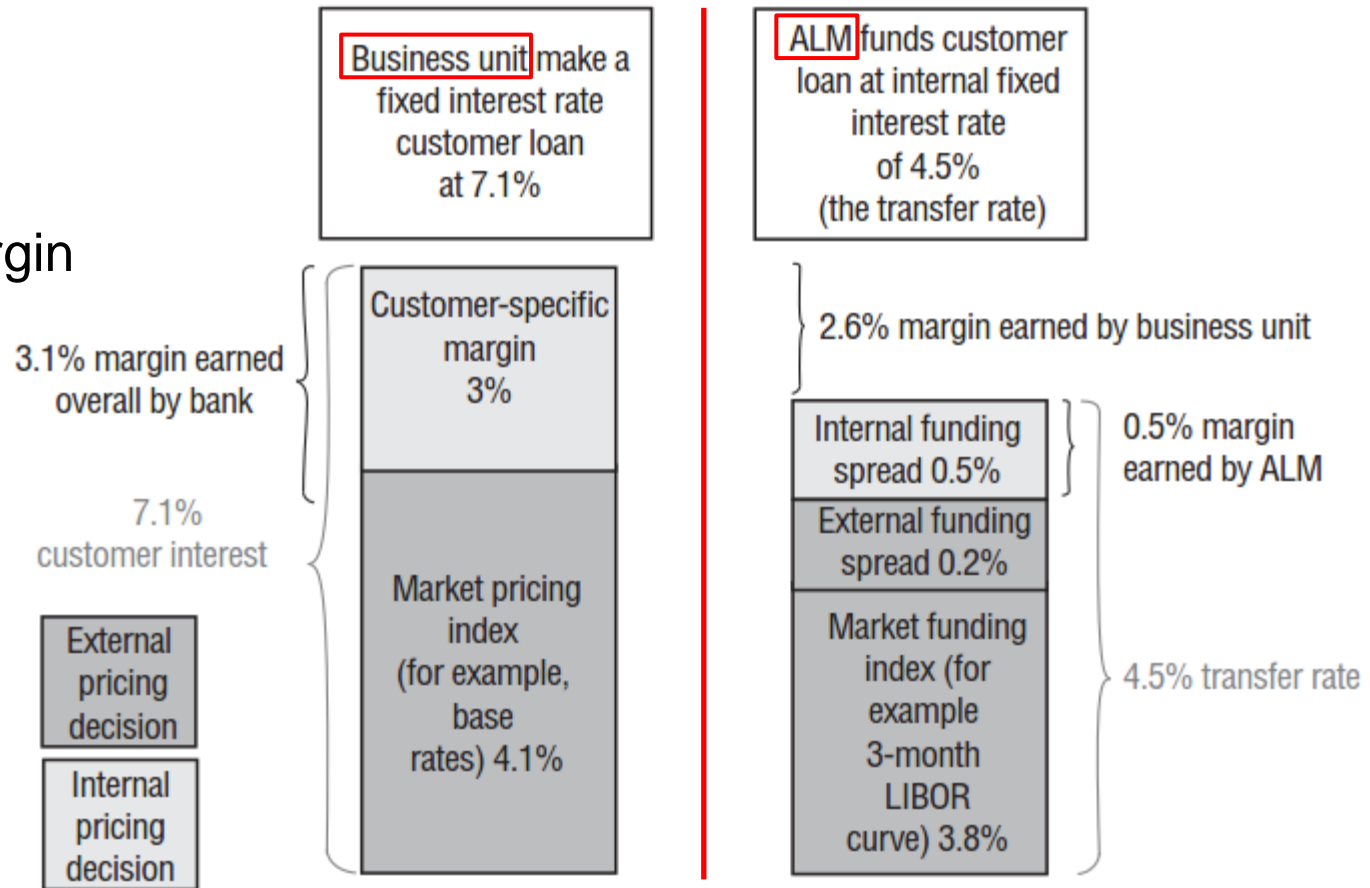
# 7. Revaluing the managed portfolio (3/4)

## Transfer Pricing / Internal Funding (Sec. 4.2-4.5)

(chart – source: IASB)

- Business Unit:**  
Pricing index  
+ ext. (customer) margin

- Asset Liability Management:**  
Funding index  
+ ext. spread  
+ int. spread  
+ int. margin





## 7. Revaluing the managed portfolio (4/4)

### Transfer Pricing / Internal Funding (Sec. 4.2-4.5)

- Idea: “*Transfer pricing (transactions) are proxies for capturing and revaluing the managed risk*“ (4.2.5)
- Transfer pricing specifies risk that is managed → but unclear whether
  - ext. funding index only OR
  - funding index + ext. spread OR
  - funding index + ext. spread + int. spread („*full transfer price*“)
- **Remaining issues:**
  - (1) Market Funding vs. Market Pricing
  - (2) Funding Index with/without spread
  - (3) Selection of funding index

} Which is (most) appropriate?

## 8. Presentation and disclosures (1/4)

(chart – source: IASB)

### Presentation in statement of financial position (Sec. 6.1)

- Three alternatives for discussion:

#### (1) Line by line:

\* no focus on net effect

\* burdensome

\* adjustment for un-recognised items?

#### (2) Aggregate adjustm.:

\* rather adequate

#### (3) Single net line item:

\* rather adequate

Presentation alternatives in the statement of financial position

			Line-by-line gross <b>1</b> up	Aggregate adjustment <b>2</b>	Single net line item <b>3</b>
<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			

## 8. Presentation and disclosures (2/4)

(chart – source: IASB)

### Presentation in income statement (Sec. 6.1)

- Two alternatives for discussion:

→ fixe rate loans, variable rate deposit,  
80% margin hedge via swap

#### (1) „Actual net interest income“

- (a) Interest income constant
- (d) Volatile interest income due to  
20% open position

#### (2) „Stable net interest income“

- (c) Interest income stabilised
- (d) Revaluation effect from DRM  
represents 20% open position

		30 Jun 20X1	31 Dec 20X1	30 Jun 20X2	31 Dec 20X2
<b>1</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)
<b>2</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)



## 8. Presentation and disclosures (3/4)

### Presentation of internal derivatives (Sec. 6.2 / A4.2)

- Internal derivatives = part of DRM → included in presentation?
- Statement of financial position: **NO**
- Income statement: **YES**
  - Existence of internal derivatives demonstrates the DRM
  - Net effect always nil
  - Effect in the banking book is part of DRM → interest income stabilised
  - (Offsetting) effect in the trading book is part of trading P/L

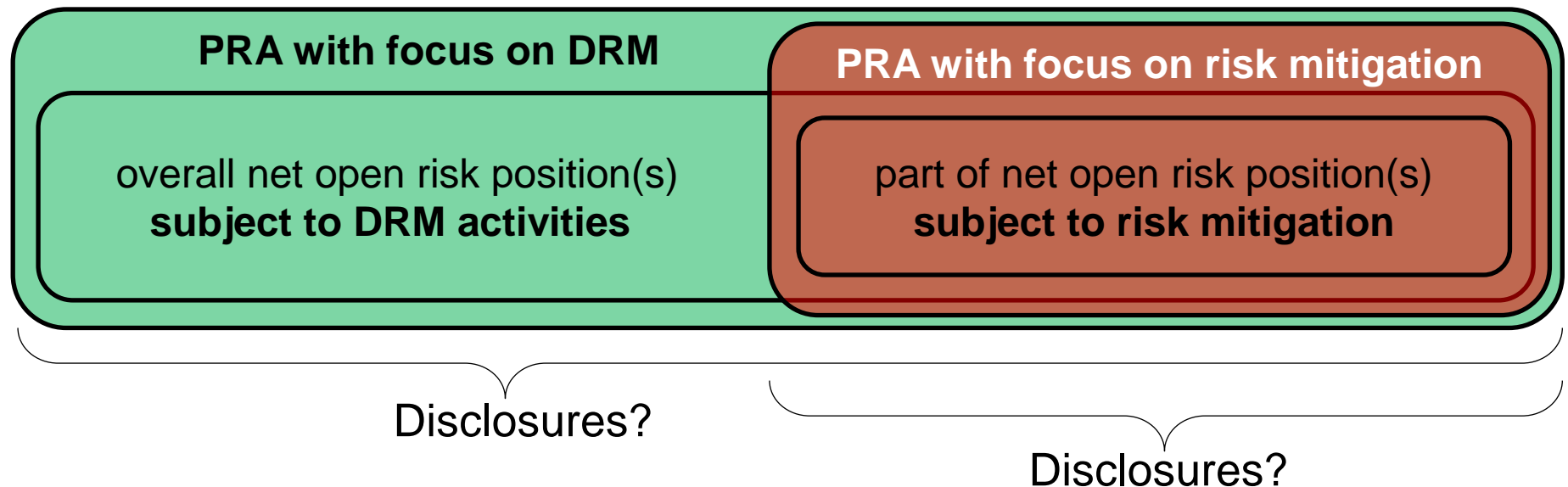
→ **Relevant for presentation purposes only**



## 8. Presentation and disclosures (4/4)

### Disclosures (Sec. 6.3)

- Entirely for discussion
- Disclosures on entire risk position or as far as PRA is applied?
- also depending on whether PRA is mandatory or optional





## 9. Other considerations (1/2)

### Date of inclusion/removal of exposures in/from a portfolio (Sec. 7.1-7.2)

- Inclusion in a portfolio
  - a) When entity becomes party to the contract (except for *pipeline transact.*) OR
  - b) Later, if incorporated in DRM subsequently→ Day 1 revaluations as “Day 1 P/L“ or amortisation?
- Removal from a portfolio
  - a) When derecognised (maturity, sale, prepayment) OR
  - b) Earlier, as soon as excluded from DRM→ Immediate recognition in P/L or amortisation?
- Currently, PRA intends alternative (a)  
→ No Day 1 P/L → no amortisation requirements



## 9. Other considerations (2/2)

### Foreign currency instruments (Sec. 7.3)

- **For discussion**: Application of the PRA on interest and FX risk if contracts are in foreign currency
- Scenarios:
  - A = all FX exposures are converted on a one-to-one basis
  - B = FX funding and FX lending match each other → DRM of interest rates in that currency
  - C = FX funding and FX lending are normal course of business → DRM of interest and FX exposures net with cross currency swaps



Deutsches Rechnungslegungs Standards Committee e.V.  
Accounting Standards Committee of Germany



## **Dr Jan-Velten Grosse**

DRSC e.V.  
Zimmerstr. 30  
D -10969 Berlin

Phone +49 (0)30 / 20 64 12 23

Fax +49 (0)30 / 20 64 12 15

[www.drsc.de](http://www.drsc.de)  
[grosse@drsc.de](mailto:grosse@drsc.de)