ROKOCO

# Caught in Crossfire: Actuaries and IFRS 4, Phase 2

27. November 2012

Swiss Actuarial Association

Stephan Otzen (ROKOCO)

# Agenda

**Introduction**

**The ED Model (quick recall)**

**The «OCI-Solution» & Asset-related Cash Flows**

**Unlocking the Residual Margin**

**Transition**

**Changes in Presentation**

**Miscellaneous**

**Outlook and Q&A**

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# ROKOCO / Stephan Otzen

Experts for Actuarial Accounting and Valuation

**ROKOCO**
**Actuarial Consulting**

> Three actuarial consultancy firms located in Munich, Zurich and Oslo
> All companies owned by Partners

> Partners with executive and senior level expertise in Insurance and Reinsurance
> Overall staff of 20+ excluding associated Partners

> Broad scope of actuarial Software developed and maintained including the recent acquisition of “ALM.IT”
> www.rokoco.com / www.rokocopartner.ch

**Stephan Otzen**
**ROKOCO Switzerland**

> Qualified Actuary (SAV & DAV)
> 8 Years with “Big Four” Audit firm
  > US-GAAP Implementation
  > IFRS 4 (1) Implementation

> Founded ROKOCO Switzerland 2010
> Co-Author of IFRS 4, Phase 2 Impact Study for Swiss Composite Group
> Various smaller IFRS 4 (2) projects

> Member of SAV Accounting “Task Force”
> Broad Expertise in designing and reviewing actuarial reporting frameworks

# Introduction

## Purpose of Presentation

- This IFRS 4, Phase 2 presentation
  - Covers the IASB discussions since the ED of July 2010 up until the Board meeting of 15.-19. October 2012 (*editorial deadline*)
  - Covers the FASB Discussion Paper and discussion only where it is likely to affect IASB's route
  - Focuses on selected topics (mostly changes), with special attention being given to aspects relevant in actuarial practice
  - Aims to help developing a view on material changes to the ED which deserve feedback in the proposed re-exposure process
  - Is based on <u>tentative</u> decisions by the IASB, i.e. it:
  - Deals with a moving target… (Re-Exposure Draft yet to be published)

# Where to start from?

Some assumptions had to be made:

- Reader should
  - Be familiar with the Exposure Draft ED/2010/8 *Insurance Contracts* (the **ED**, or **[draft] standard**)
  - Be familiar with the basic (IFRS) accounting concepts and terminology, such as P/L and OCI
  - Be “willing” to accept a slight overweight of life insurance related topics, especially due to *participating* business
- Reader should *not*
  - Expect an introduction to actual valuation techniques
  - Expect a full analysis of change starting with the ED

- Items are presented in order of practical relevance

# Main Sources Used

All conclusions drawn from publically available information

- Official IASB Documentation:
  - Staff Paper "Effect of board redeliberations on ED *Insurance Contracts*"
  - IASB / FASB Agenda Papers
  - IASB Meeting Summaries
  - Other projects' updates, summaries, … as appropriate
  - See www.ifrs.org

- Other sources, e.g. "Big Four"
  - Meeting summaries
  - Project updates
  - …

# Some Notation

Making sure everyone talks about the same thing

- Key abbreviations and terms
  - **B/S** shall refer to the "Statement of Financial Position"
  - **SoCI** – "Statement of Comprehensive Income"
  - **P/L** – "Income Statement"
  - **OCI** – "Other Comprehensive Income"
  - **UoA** – "Unit of Account"
  - **RA / RM** – Risk Adjustment / Residual Margin
  - **BBA / PAA** – Building Block Approach / Premium Allocation Approach
  - "**Deposit Accounting**" – used as an informal term describing contributions to / payments from insurance liabilities that are not recognised in SoCI but instead by a direct booking to / from assets backing the policies (cf. current "Universal Life Type Accounting")

# After the Comment-Letter-Storm

Everyone is pulling

*You are here…*

*Users:*
**Analysts**

Actuaries

*Preparers:*
**CFOs/CEOs**

**IASB**

**Other IFRSs/ Framework**

**FASB??**
*or is convergence dead?*

**Regulators?**

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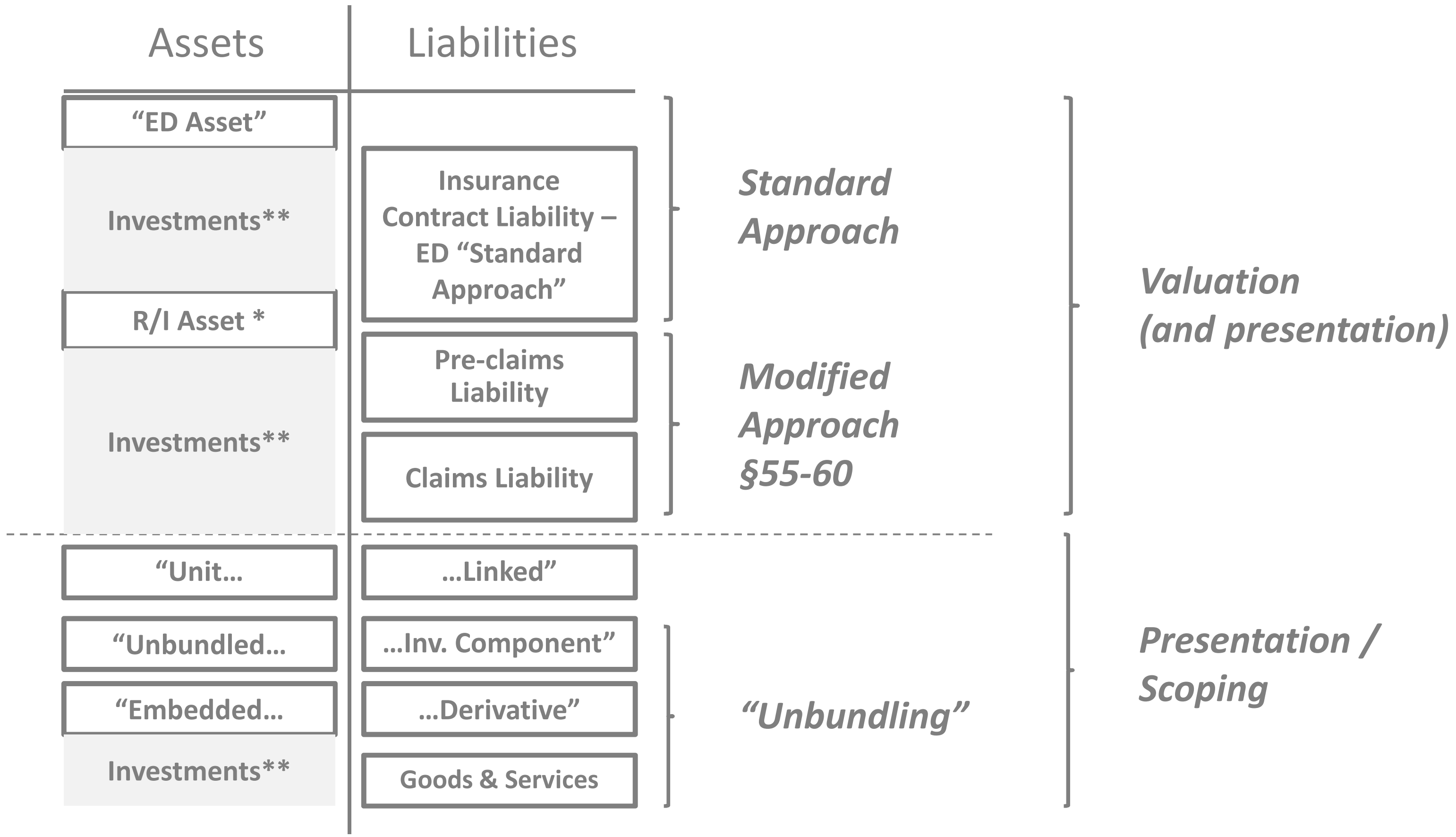
# B/S according to Exposure Draft

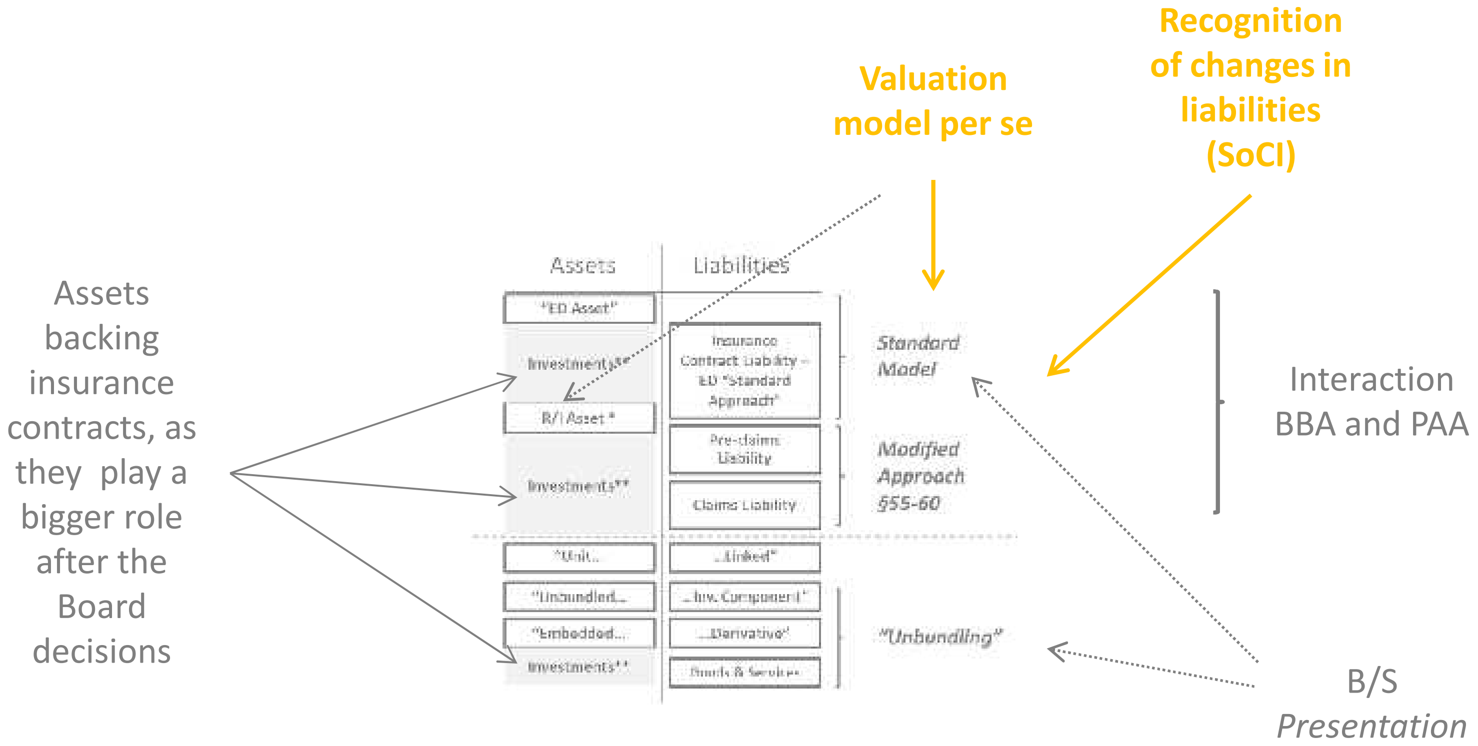
## Quick recall




** Either Model, could be liability as well*
*** Not in scope of [Draft] Standard*

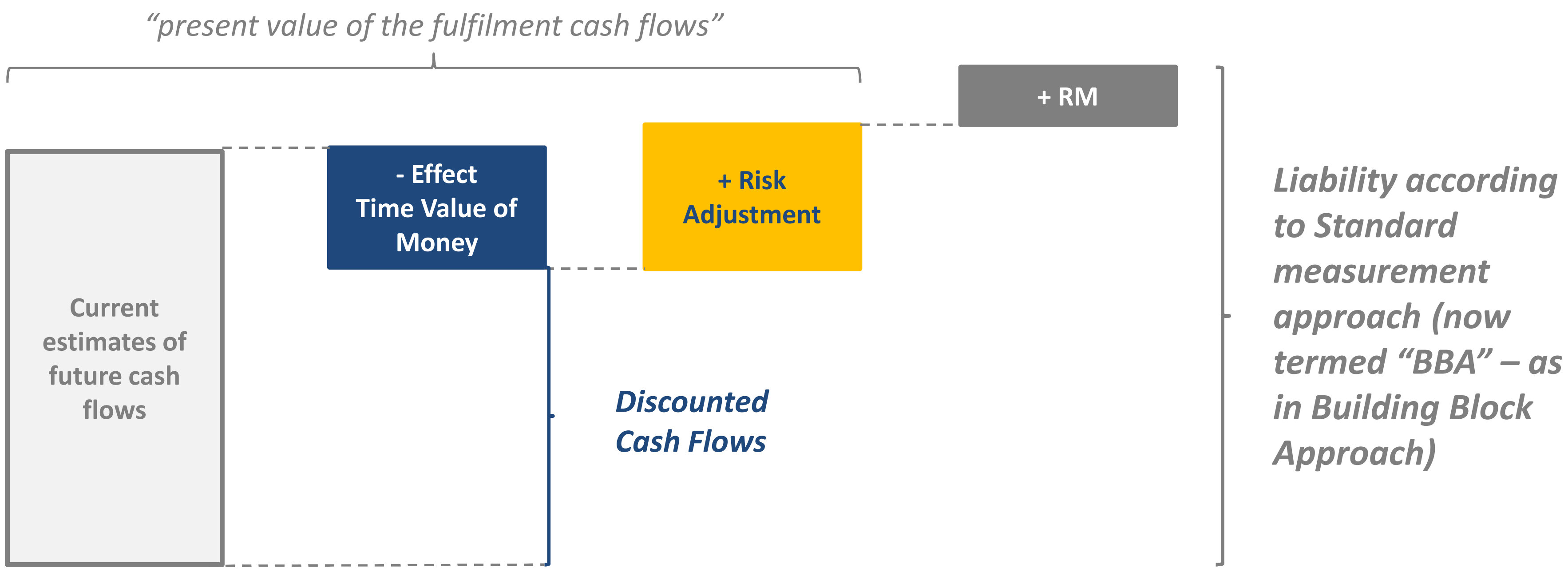
# Today's Focus

Selected aspects, with a valuation actuary's perspective



# ED “Standard Approach” – Building Blocks

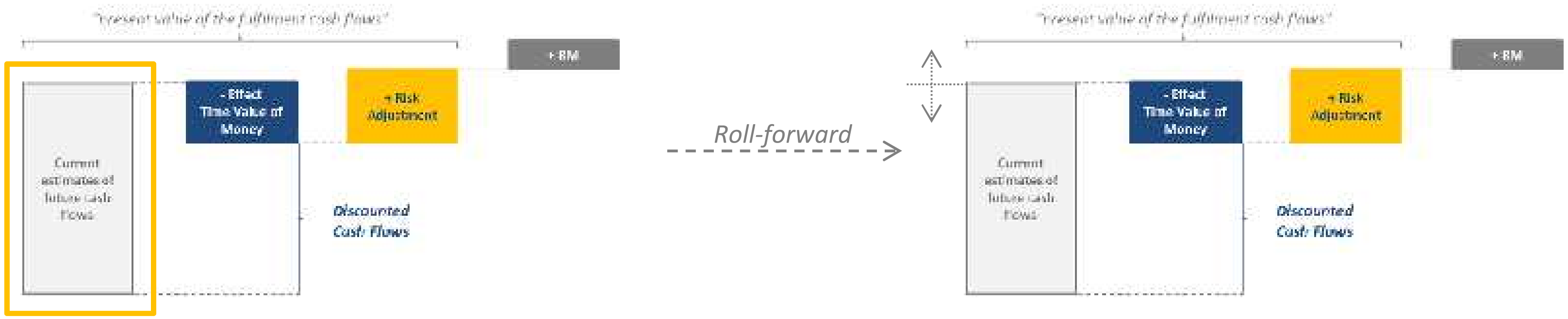
Quick recall




- Unit of account is Portfolio, except for
  - Residual Margin: Cohort
  - Acquisition Expenses: Insurance Contract
- Detailed Reconciliation of amounts required for disclosure
- BBA not applicable for contracts with a coverage period of appr. 1 year or less

# ED "Standard Approach" – Cash Flows

## Quick recall cont'd



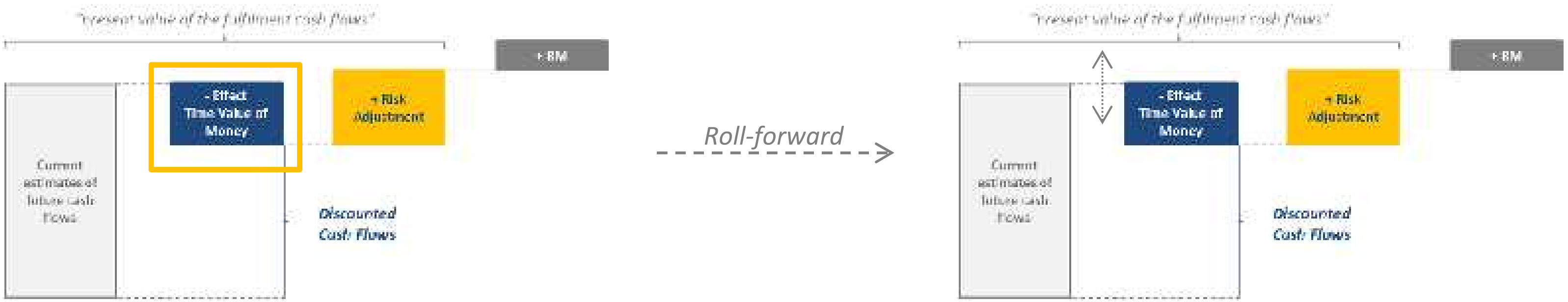

*Liability at time t*

*Liability at time t+1*

- Cash Flows:
  - Current, unbiased
  - Probability-weighted
  - Including certain acquisition costs and certain admin costs
  - Including future discretionary payments
- Change in Liability:
  - Due to *expected* cash in / out: DEPOSIT ACCOUNTING, i.e. recognised with debit / credit to assets (backing liabilities)
  - All remaining effects: RECOGNISED IN P/L

# ED "Standard Model" – Discounting

## Quick recall cont'd




*Liability at time t* *Liability at time t+1*

- Discounting:
  - Required (except where not material); little guidance in ED
  - Market rates allowing for "liquidity premium"
  - If participating, ok to use replicating portfolio techniques
  - No adjustment for non-performance risk of insurer
- Change in Liability:
  - All effects to be RECOGNISED IN P/L
  - I.e. unwind of discount; and
  - Change in discount rates
  - (a model similar to those for bonds held at FV through Net Income)

# ED "Standard Model" – Risk Adjustment

## Quick recall cont'd

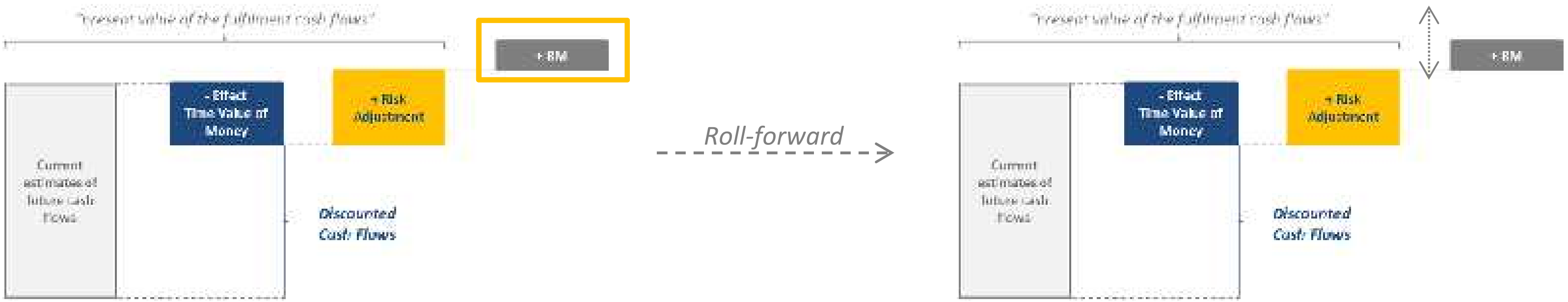

*Liability at time t*

*Liability at time t+1*

- Risk Adjustment:
  - ED Definition focussing on downside
  - ED prescribed scope of possible techniques
  - Diversification explicitly limited to intra-Portfolio level
- Change in Liability:
  - All effects: RECOGNISED IN P/L
  - Change in: price for risk, level of uncertainty / risk, volume and cash flows, unwind of discount, discount rates

# ED "Standard Model" – Residual Margin

## Quick recall cont'd




*Liability at time t* *Liability at time t+1*

- Residual Margin:
  - Purely accounting driven:
  - Initial balance set to eliminate "gain at inception" (if any) on a cohort level (i.e. subportfolio of similar inception date and coverage period)
  - Run-off during coverage period on a locked-in pattern
- Change in Liability:
  - All effects: RECOGNISED IN P/L

# Alternative Model – Now: "PAA"-Model

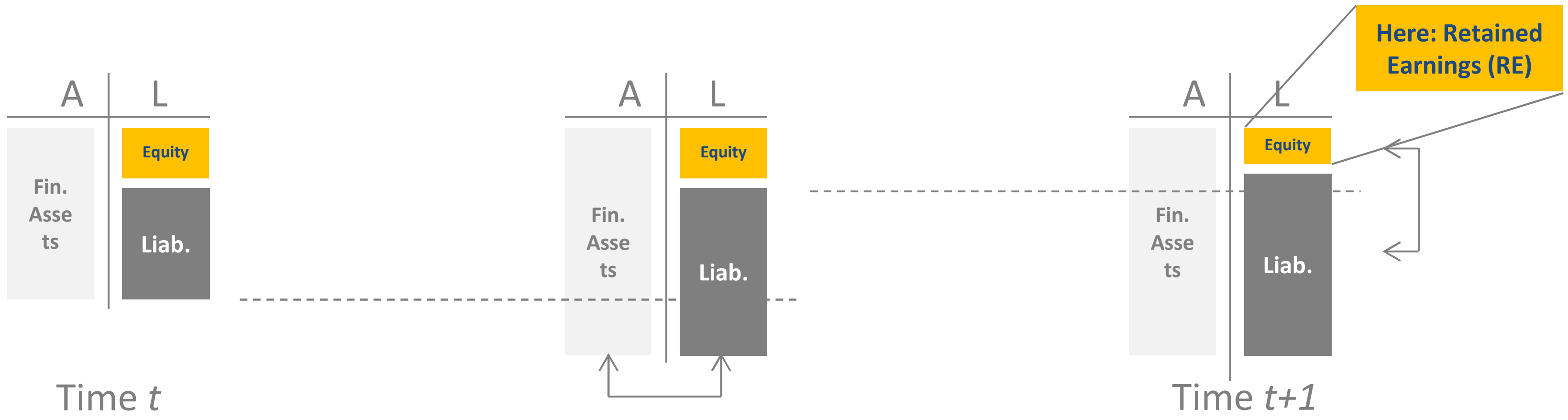
Mandatory for most contracts with coverage period of (approx.) one year or less

## Liability split into two elements:


- Essentially "unearned premium" *after* deducting incremental acquisition costs
- Discounting required for future premiums
- Tested for adequacy ("onerous contracts")

- PV of fulfilment CF for claims, that is
  - Discounted expected claims payments; *plus*
  - Risk Adjustment for claims payments

# Summary Changes in Liability




Expected Cash Flows recognised by way of deposit accounting:

E.g. net in-flow

(debit) “assets”

(credit) “liability”

All other changes of liability recognised by charge to P/L :

E.g. net increase

(debit) “expense”

(credit) “liability”

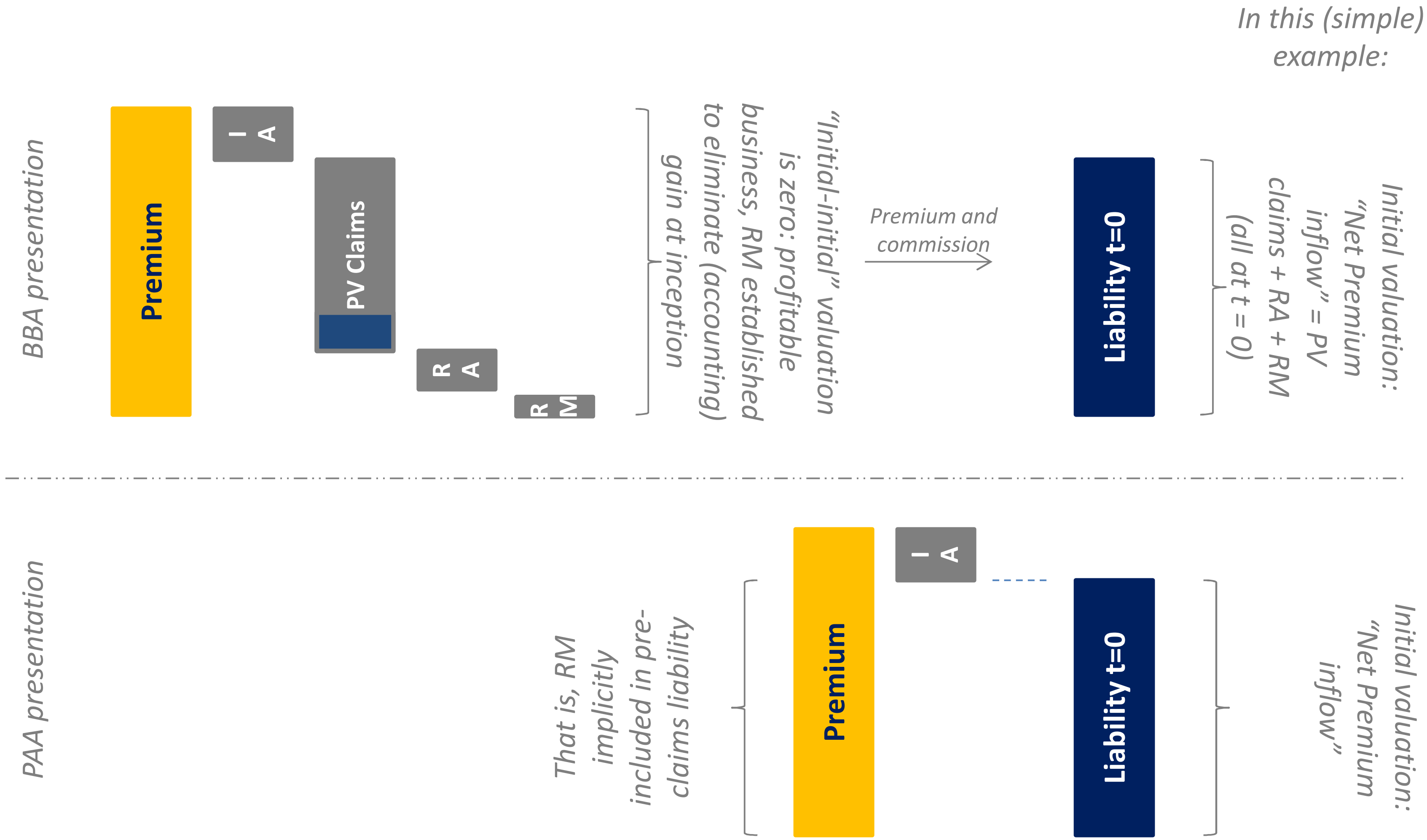
# Illustrative Example

Basics

- We will discuss the effects based on the following example:
  - Single premium of 100 (i.e. PV premium = 100)
  - Incremental acquisition expenses of 4 (ED definition), payable immediately, no claw backs etc.
  - Coverage period of 1 year
  - Best estimate of PV of guaranteed benefits 80 (NL) / 70 (Life)
  - Best estimate of PV of discretionary benefits 0 (NL) / 10 (Life), depending on performance of certain assets
  - Benefits expected to be paid within 3 years
  - Risk Adjustment 13
  - Think of either single premium life insurance business with discretionary participation feature or a long-tail non-life business

# Illustrative Example

## Comparison of methods



# Stakeholders' Likes and Dislikes

Main concerns explaining most of the key changes to ED

**Preparers**

- CFOs want to see the premium on the face of the P/L
- Don't want volatility in either P/L or equity
- In particular, don't like accounting mismatches and don't want to be forced into full-fair-value
- Sceptical about RM recognition if losses occur from assumption changes
- Question limitations to RA methods and diversification
- Dislike "no RM at transition"

**Analysts**

- Want as much information as possible
- From a model they feel they understand

**IASB**

- Regards investment components (in insurance contracts) with general suspicion
- Dislikes divergence from revenue recognition project
- Generally, strived for convergence with FASB
- AND: Certainly wants to avoid *too* much opposition from preparers (including the Board's objective to reduce accounting mismatches)

Where did this lead to (so far)…?!

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# Discounting

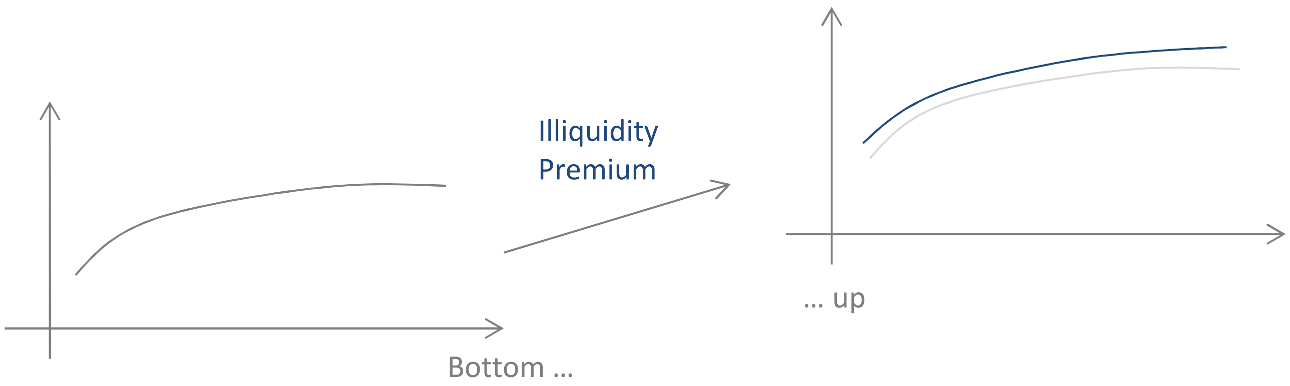
Conceptually unchanged

- IASB confirmed many key ED proposals and clarified certain aspects regarding discounting:
  - Objective: allow for time value and reflect liability characteristics
  - Same objective for participating and non-participating contracts
  - Current rates, reflecting timing & uncertainty of CF but excluding non-performance risk (and no effects recognised elsewhere in valuation)
  - Required for all CFs, except where effect is immaterial (i.e. required for Non-Life Long-Tail claims!)
  - No practical expedient for determining the discount rate
  - Disclosure of yield curve for non-participating contracts
  - For participating contracts additional guidance for discounting of CFs that depend on asset-performance
  - Replicating portfolio technique *not* required

# Discounting – Non-Participating

No specific guidance…

- Bottom-up approach per the ED still acceptable:
  - Discount rate must not factor in risks that are covered elsewhere in the model (e.g. CF estimates or RA)
  - Thus, one view is to use risk-free rates plus an Illiquidity Premium



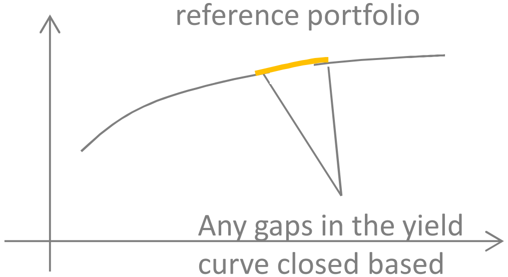

  - But still concerns about consistent approach to determine illiquidity premium

# Discounting – Non-Participating

… but additional approach introduced

Reference portfolio with similar liquidity as insurance portfolio?

Yield curve derived from actual or reference portfolio



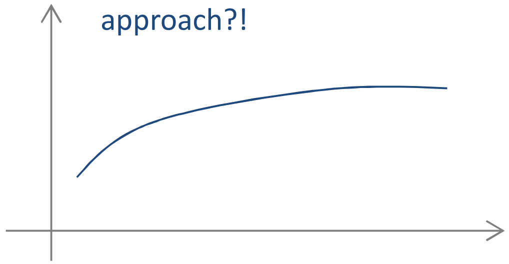
Any gaps in the yield curve closed based on Level 3 guidance for FV measurement.

Top …

Adjustment for timing differences (“Type 1”)

Adjustment for Risk Differences (“Type 2”): e.g. credit risk and additional risk premium

Insurers need not make an adjustment for Differences in Liquidity (“Type 3”) -> Inconsistency with bottom-up approach?!



… down

- Top-Down approach provides for more flexibility
- But how to compare the liquidity of assets (e.g. loan) and an insurance liability?

- And: Who (in an entity / group) will set the rates?

# Summary discount rates

- Setting the discount rates is not a focus of this presentation, nonetheless there are some aspects that are relevant:

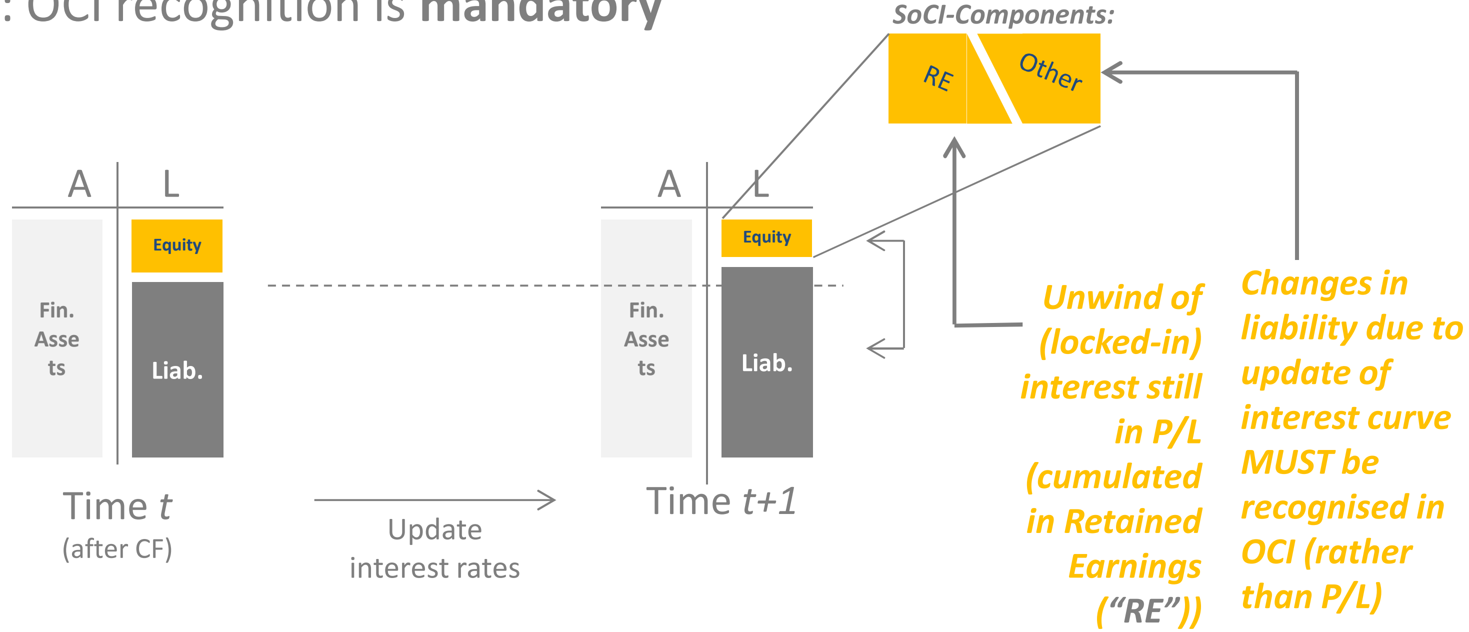
- Discount rates are to be updated

- Different rates are required for participating and non-participating business

# "OCI-Solution"

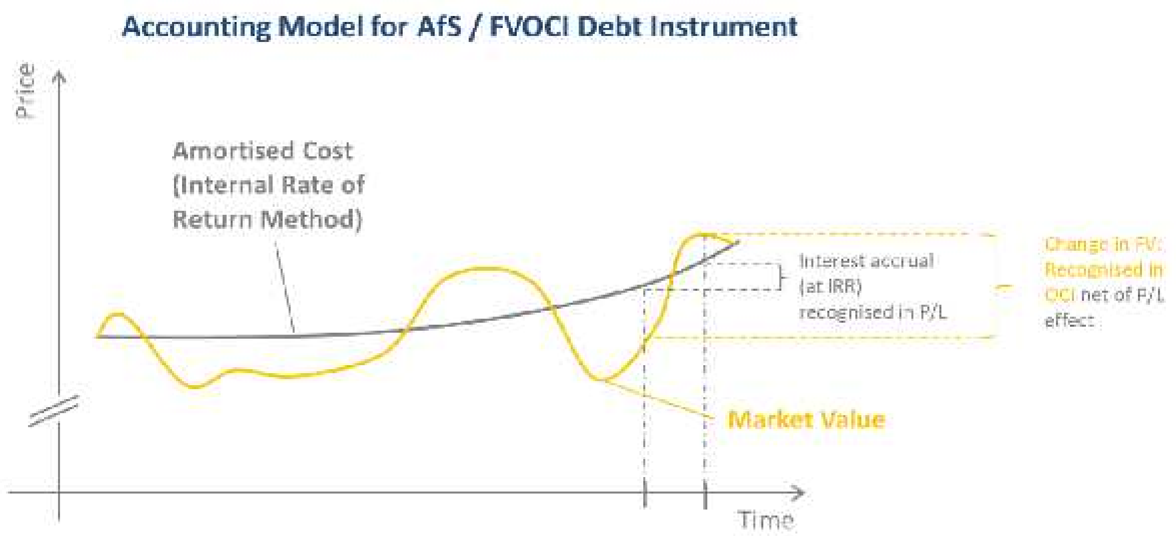
Most relevant single change

- IASB responded to concerns about P/L volatility
  - Valuation model unchanged: current interest rates at valuation date
  - As is recognition of unwind of interest in P/L based on **locked-in rate**
  - But: recognition of changes due to discount rate update in OCI
  - And: OCI recognition is **mandatory**



# OCI-Solution in Short

Like internal rate of return model for AfS-classified Bonds




*IRR-approach nicely accrues interest to last IRR-derived value;*

*Market Value changes nicely balance out over life-time.*

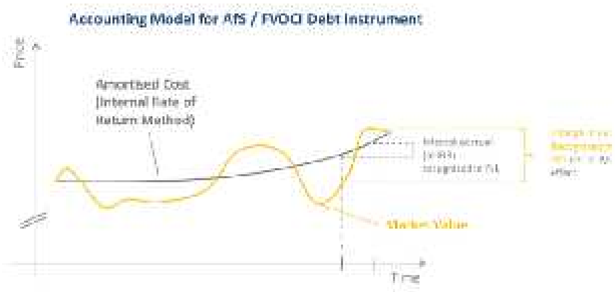
- The model is easy to explain, compares to standard approach for debt instruments and *in theory* is straight-forward
- However, for Cash Flows from an insurance liability things are likely to be tricky *in practice*

# OCI-Solution in Short

## Example 4 from Agenda Paper J (May 2012 Meeting)

| Year | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Expected CF | (1) | 1.500.000 | 2.500.000 | 1.500.000 | 1.500.000 | 500.000 | 500.000 | 300.000 | 200.000 | 500.000 | 100.000 | 100.000 | 100.000 | 200.000 | 200.000 | 300.000 |
| boy rate | (2) | **6,38%** | 6,18% | 6,22% | 5,15% | 5,55% | 6,16% | 4,56% | 3,82% | 2,97% | 3,43% | 4,05% | 4,75% | 4,43% | 2,80% | 2,20% |
| ***Liability run-off and interest expense at intially applicable "rate" (i.e. flat yield curve @6,38%)*** | | | | | | | | | | | | | | | | |
| PV CF | (3) | 7.795.897 | 6.793.276 | 4.726.687 | 3.528.249 | 2.253.352 | 1.897.115 | 1.518.151 | 1.315.009 | 1.198.907 | 775.397 | 724.868 | 671.114 | 613.931 | 453.100 | 282.008 |
| Interest Exp. (6,38%) | (4) | 497.378 | 433.411 | 301.563 | 225.102 | 143.764 | 121.036 | 96.858 | 83.898 | 76.490 | 49.470 | 46.247 | 42.817 | 39.169 | 28.908 | 17.992 |
| ***Liability at respective updated "rate" (i.e. flat yield curve per above)*** | | | | | | | | | | | | | | | | |
| PV CF | (5) | 7.795.897 | 6.835.690 | 4.751.811 | 3.681.035 | 2.331.319 | 1.913.617 | 1.634.652 | 1.450.687 | 1.345.428 | 869.308 | 782.636 | 700.921 | 638.325 | 478.433 | 293.542 |
| PV CF new | (6) | 6.835.690 | 4.751.811 | 3.681.035 | 2.331.319 | 1.913.617 | 1.634.652 | 1.450.687 | 1.345.428 | 869.308 | 782.636 | 700.921 | 638.325 | 478.433 | 293.542 | 0 |
| Cash Flow | (7) | -1.500.000 | -2.500.000 | -1.500.000 | -1.500.000 | -500.000 | -500.000 | -300.000 | -200.000 | -500.000 | -100.000 | -100.000 | -100.000 | -200.000 | -200.000 | -300.000 |
| Change Liab due to int | (8) | 539.793 | 416.121 | 429.224 | 150.284 | 82.297 | 221.035 | 116.035 | 94.741 | 23.880 | 13.329 | 18.285 | 37.404 | 40.107 | 15.109 | 6.458 |
| Charged to P/L | (9) | 497.378 | 433.411 | 301.563 | 225.102 | 143.764 | 121.036 | 96.858 | 83.898 | 76.490 | 49.470 | 46.247 | 42.817 | 39.169 | 28.908 | 17.992 |
| Recognised in OCI | (10) | 42.415 | -17.290 | 127.661 | -74.818 | -61.467 | 99.999 | 19.177 | 10.843 | -52.610 | -36.142 | -27.962 | -5.413 | 938 | -13.798 | -11.534 |
| Accumulated OCI | (11) | 42.415 | 25.125 | 152.786 | 77.968 | 16.501 | 116.500 | 135.677 | 146.521 | 93.910 | 57.769 | 29.807 | 24.394 | 25.333 | 11.534 | 0 |

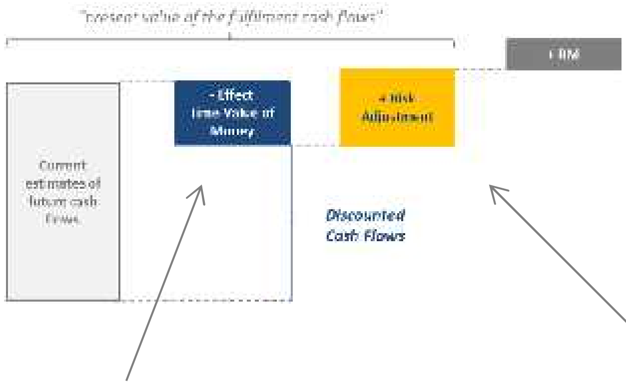
AOCI = Accumulated OCI [= (informally...:) OCI-"Retained Earnings"]




Grey line in graph is item (3)
Orange line is item (5)
Overall grey / orange difference is item (11)
P/L charge is item (4) [and (9)]
OCI charge is item (10)

# OCI-Solution – Building Blocks affected

Vast impact on certain Building Blocks

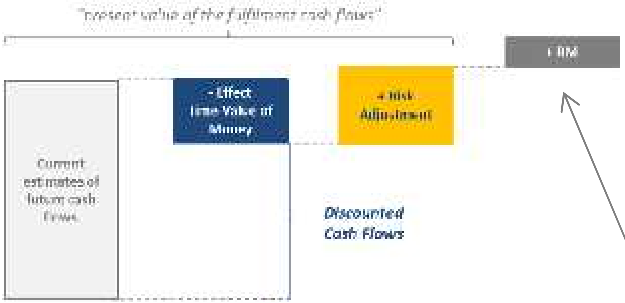



- Discounting (of Cash Flows):
  - This is the main and obvious item affected
  - See details on following slides
  - Effect based on rates locked-in at inception
  - Applies as well to claims liability for PAA!
- Risk Adjustment:
  - All effects on RA related to discounting are to be reported in OCI as well (e.g. CoC-approach: is PV concept)
  - Depending on the RA-measurement approach this can be challenging (e.g. identify interest effect in VaR-method)
  - But already required by ED (as part of disclosures)

# OCI-Solution – Building Blocks affected

Limited to no impact on other Building Blocks

BUT: No "OCI-solution" for unbundled elements (e.g. embedded derivatives are typically subject to FVNI)




- Cash Flows:
  - Interest related effects on cash-flows are *not* in scope of OCI solution
  - E.g. changes to CF due to interest-sensitive lapse rates or inflation-indexed CF
  - Recognise as other changes in estimates (see below)
- Residual Margin:
  - Interest rate accruing to "Basic RM" is locked in at rates at inception; no reflection of updated rates
  - But overall release pattern after unlocking not clearly specified

# "Locking-in" the Rate

Not as simple as it may sound

IASB Staff Paper examples all assume a flat term structure, thus they are of limited help for practical assessment

- It is not clear which rate should to be locked in
- *At inception*, there are four candidates:
  - **Internal Rate of Return** – staff made reference to this rate; it compares best to P/L effect on FVOCI debt instrument; BUT: impracticable to implement for CFs from an insurance liability?!
  - **Spot Rates** – straight-forward for each term's CFs (in fact similar to a "multiple-IRR" for each CF per term), but involves many rates to be used (see below)
  - **Forward Rates** – more difficult to explain but implementation with less rates possible (see below)
  - ***"Duration (Spot) Rate"*** *– see below section on transition (not further discussed here)*

# OCI-Solution – Interest Rate effects

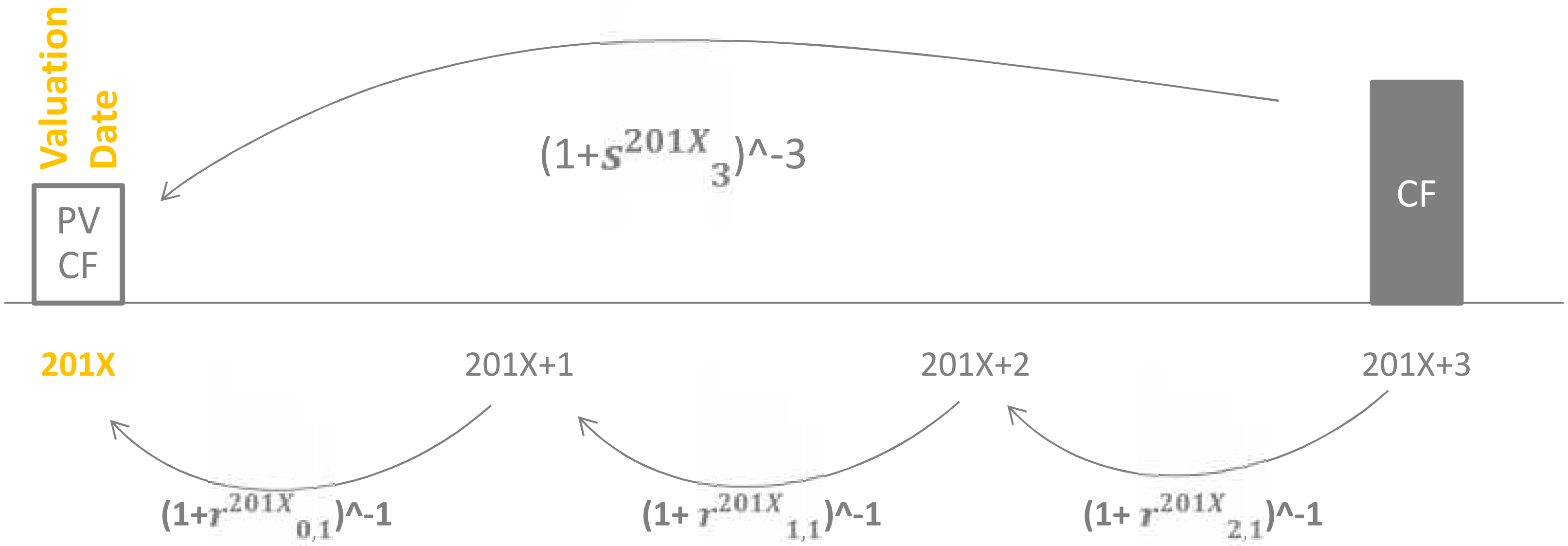
Some notation

Consider an insurance contract issued in year 201X…

… with an expected non-discretionary CF in 201X+3 ($CF_{X+3}$).

At 201X the PV of $CF_{X+3}$ can be calculated with the 201X 3yr *spot* rate ($s^{201X}{}_{3}$) or …

… by using the 201X 1yr *forward* rates ($r^{201X}{}_{\cdot,1}$):



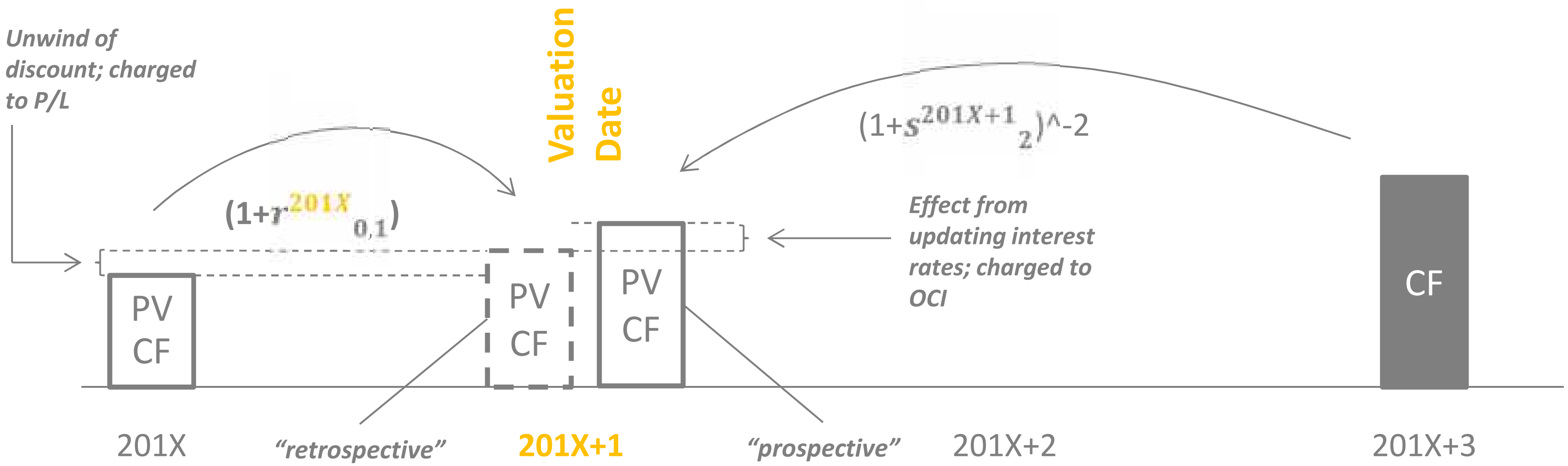
# OCI-Solution

Vast Impact on Valuation Models – Life AND Non-Life

On the next valuation date current spot rates are used for discounting $CF_{X+3\cdots}$

… but the accrual of interest is calculated at *locked-in* (1-year) forward rates. The interest expense is recognised in P/L.

The difference, if any, between retrospective and prospective CF valuation (i.e. the effect from updating discount rates) is recognised in OCI

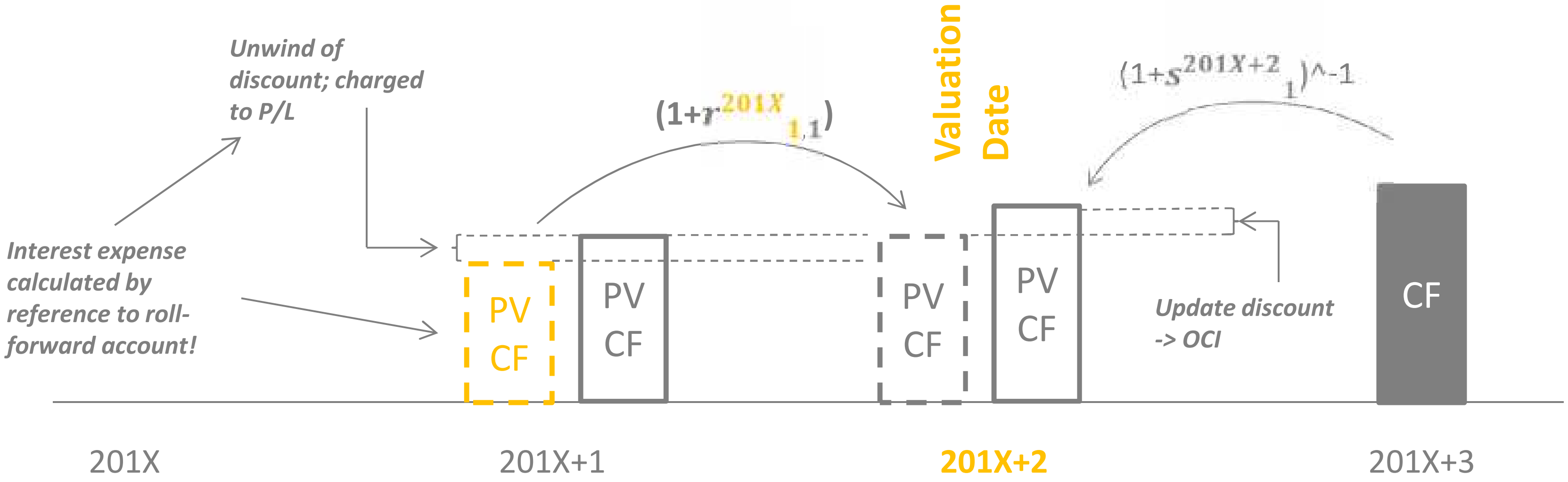


# OCI-Solution

## Vast Impact on Valuation Models – Life AND Non-Life

Current spot rates keep being used for discounting $CF_{X+3}$ und thereby determining the liability recognised on the face of the B/S…

… while the interest expense is calculated by using locked in (forward) rates AND the “original” (i.e. based on locked-in rates) PV CF series:




**As a consequence, insurers need to store the historic forward rates as well as the resulting PV CF series to comply with the OCI-solution!**

# Practicality and interest rates

Use of forward rates reduces number of rates involved

- By using forward rates, all present values relating to one issue year can be unwound with the same rate:

| Inception / Issue Year | Cash Flow "Term" (as of Issue Year) 1 | 2 | 3 | 4 | … | |
|---|---|---|---|---|---|---|
| 201X | X | X | X | X | | All rolled-forward in 201X based on $r^{201X}_{0,1}$ |
| 201X-1 | | X | X | X | | All rolled-forward in 201X based on $r^{201X-1}_{1,1}$ |
| 201X-2 | | | X | X | | All rolled-forward in 201X based on $r^{201X-2}_{2,1}$ |
| 201X-3 | | | | X | | All rolled-forward in 201X based on $r^{201X-3}_{3,1}$ |
| … | | | | | | |

***If maximum CF «term» is N years, then N forward rates need to be used in a given year***

# Practicality and interest rates

Use of forward rates reduces number of rates involved

- By using spot rates, all present values relating to one issue year need separate rates for unwind:

| Inception / Issue Year | Cash Flow "Term" i (as of Issue Year) 1 | 2 | 3 | 4 | … | |
|---|---|---|---|---|---|---|
| 201X | X | X | X | X | | Rolled-forward in 201X based on term related spot rate $s^{201X}_i$ |
| 201X-1 | | X | X | X | | Rolled-forward in 201X based on term related spot rate $s^{201X-1}_i$ |
| 201X-2 | | | X | X | | Rolled-forward in 201X based on term related spot rate $s^{201X-2}_i$ |
| 201X-3 | | | | X | | Rolled-forward in 201X based on term related spot rate $s^{201X-3}_i$ |
| … | | | | | | |

***If maximum CF «term» is N years, then N * (N+1) / 2 spot rates need to be used in a given year***

# Additional Comments

Unparalleled complexity for determining interest expense?

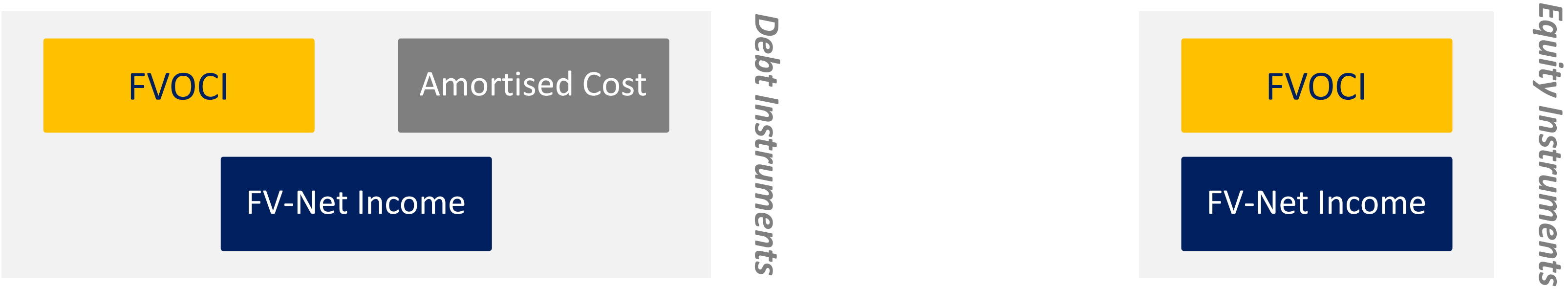
- Regardless of rate used, insurers always need to store the original “unwind-pattern”
  - Store pattern and interest expense right away as short-cut?
  - Locked-in rates will apply to increases of Cash Flows as well
- Side-remark: The insurance contract methodology differs from IAS 19 (as amended in 2011) requirements
  - Somewhat similar concept in that P/L charge is derived from one predetermined rate and any deviation to the actual rate is recognised in OCI
  - BUT: P/L relevant rate is reset each year!

# OCI-Solution

Corresponding Changes to IFRS 9

- Supplementary amendment to IFRS 9:
  - IFRS 9 will include a Fair Value through OCI (“FVOCI”) category for debt instruments
  - Very similar to current Available-for-Sale classification (but different eligibility criteria and impairment test – out of scope)
  - Mandatory OCI-solution likely to force insurers to FVOCI category for bonds

*IFRS 9 Classification Options for Debt and Equity Instruments (high level):*



# Participating Contracts

## Introduction

Participating Contracts are referred to as contracts that provide the policyholders with the contractual right to share (either or a combination of):

**the performance of a specified pool of insurance contracts;**

**the profit or the loss of the entity that issues the contract**

**the performance of a specified pool of assets;**

**Most relevant from practical point of view**

The insurer may have discretion over the amount and timing of cash flows that result from the participation feature. Thus:

The relevant performance in one period may be shared with policyholders in subsequent periods or may even be shared with different generations of policyholders.

# Participating Contracts

Special Guidance

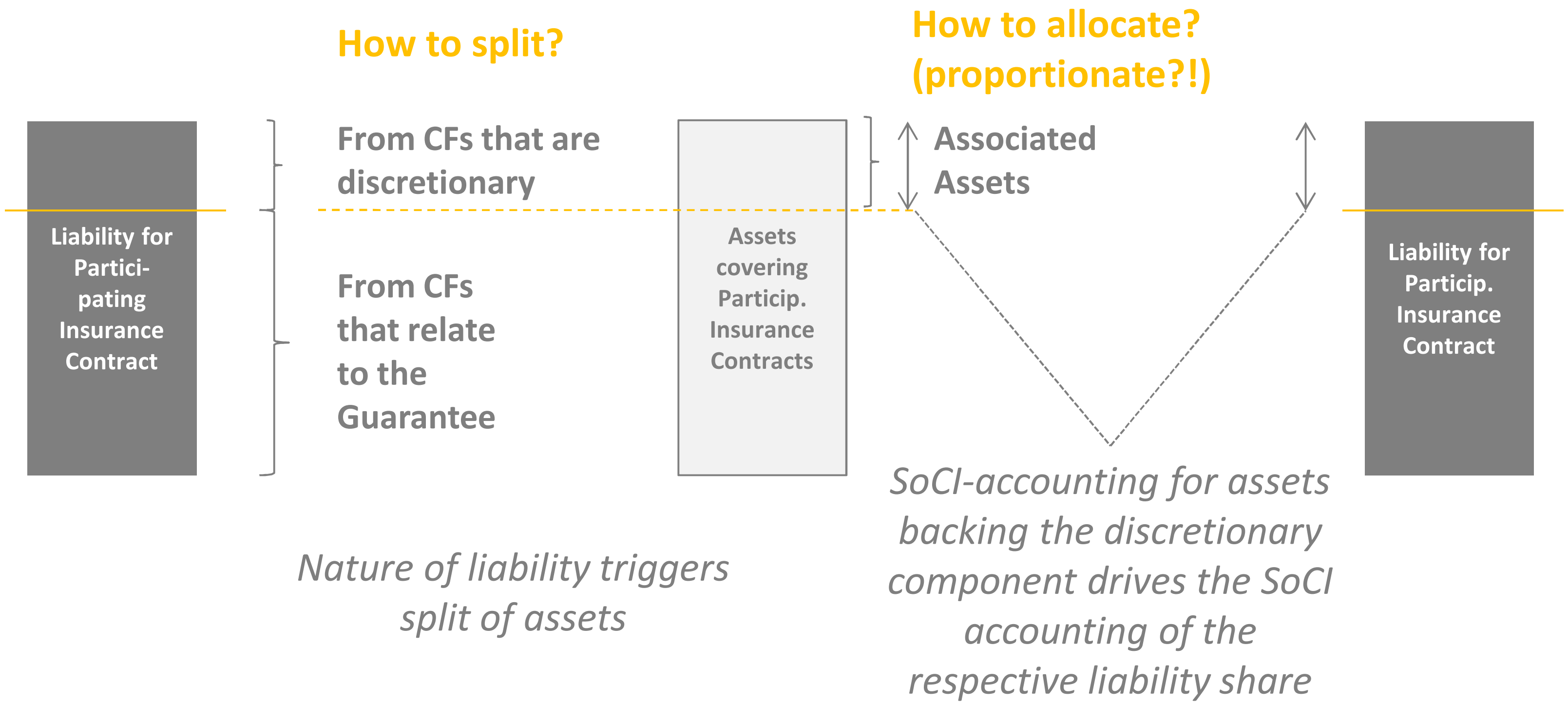
- All tentative decisions of the boards equally apply to participating contracts.

- Plus there are three decisions specific to participating contracts
  - Boundary: All cash flows arising from **current contracts** to be included, regardless of whether they are **paid to current or future policyholders**
  - "Mirroring Approach": See following slides
  - Cash Flows and discounting: CFs to be projected in line with IFRS measurement (!) of items generating them; discount rates should reflect the dependence of cash flows on the performance of assets, if any, that affect the amount, timing or uncertainty of those cash flows.

# The “Mirroring Approach”

Key concept for Valuation of Participating Contracts

- Goal is to (further) reduce accounting mismatches, by way of
- Aligning accounting of liability with accounting for “associated” assets:



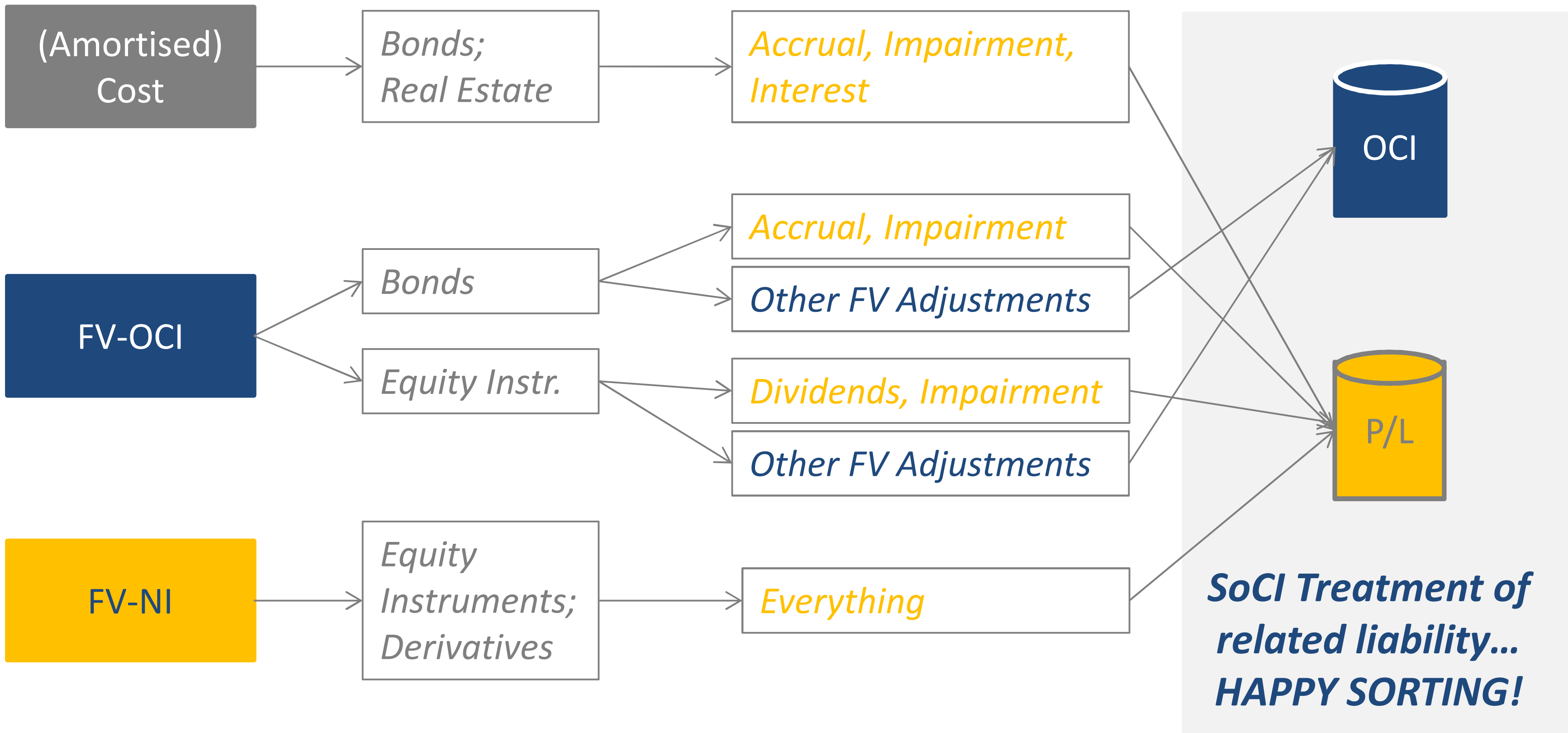
# Issues with Mirroring Approach

The problem with troubleshooting is that the trouble shoots back…

- Mirroring conflicts with the OCI approach
  - Different treatment for example if associated assets are **FVNI**:
  - Mirroring requires all changes of asset-FV to be recognised in P/L whilst (mandatory) OCI-Approach does require P/L and OCI
  - Thus, statement from Board that Mirroring should have precedence over OCI approach (i.e. **Mirroring “trumps” OCI**)
  - Unfortunately, wording after October 2012 Board Meeting is rather vague; Staff Paper 2F however indicates that trumping rule refers to cash flows only that are asset dependent
  - Further clarification expected
- Mirror Accounting itself is difficult in practice: see next slides

# Mirror Accounting in Practice

Let's look at the Asset Class and SoCI-treatment zoo an insurer runs

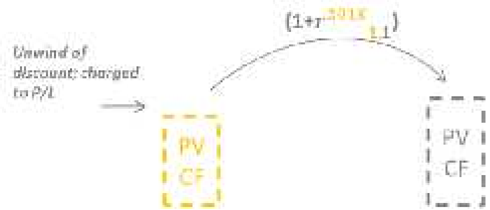



***Mirroring applies to Unit Linked as well (i.e. no OCI-issue!)***

# How things get even worse

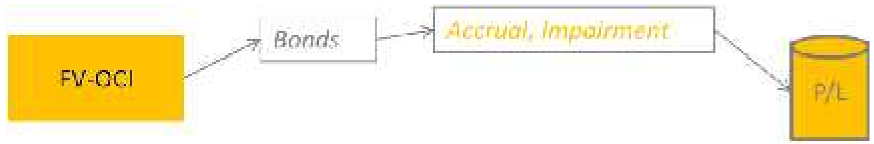
Co-Existence of different Interest Rates

- OCI-Approach for interest expense (non-participating component):




**This is the interest rate used to discount CFs (i.e. risk free *plus* illiquidity premium)**

- However, e.g. for a zero-Coupon Bond, the main P/L effect will be calculated based on its internal rate of return…




- … and so will the P/L charge for the related (participation) share of the liability
- **So, the bottom line is: Various rates to calculate interest cost for one liability (guaranteed and participation element)!**

# Remember?: You are here

Well, then…

***"[…] combining both the OCI decision and the mirroring decision can be operationally complex. However, the staff believe that the information presented in both the statement of financial position and the statement of comprehensive income is useful and understandable for users of financial statements."***

*Agenda Paper 2F Joint October 2012 Meeting*
*"Overview of decisions on participating contracts"*

# Participating Contracts – One More Thing

Yet an other Board decision

- Somehow, all the P/L guidance needs to be aligned with the additional guidance regarding discounting:

*“[The Board made the] tentative decision that the discount rate for cash flows arising from a participating contract should reflect the dependence of those cash flows on the performance of those assets, if any, that affect the amount, timing or uncertainty of those cash flows. This decision achieves consistency between the characteristics of those cash flows (ie their amount, timing and uncertainty) and the discount rate for those cash flows.”*

*Agenda Paper 2F Joint October 2012 Meeting*
*“Overview of decisions on participating contracts”*
*Highlighting added*

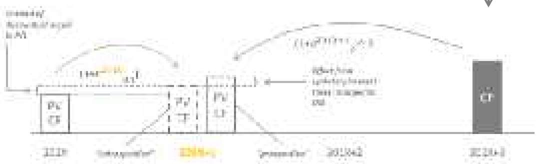
# Summary Participating Contracts

## What it takes

1. Separate guaranteed CFs from discretionary CFs

Liability for Particip. Insurance Contract

2. For guaranteed component follow OCI-approach



3. Sort discretionary CFs by classification of underlying assets –
And talk to your CIO on a good day…

(Amortised) Cost

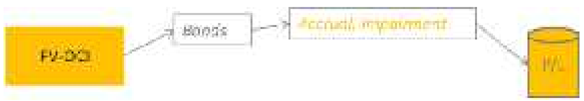
FV-OCI

FV-N

4. Discount CFs with rate that reflects the dependence of cash flows on the performance of assets

- Effect Time Value of Money

5. Calculate SoCI contribution from unwind




Finally, quickly explain the results to Management and Auditor. Done!

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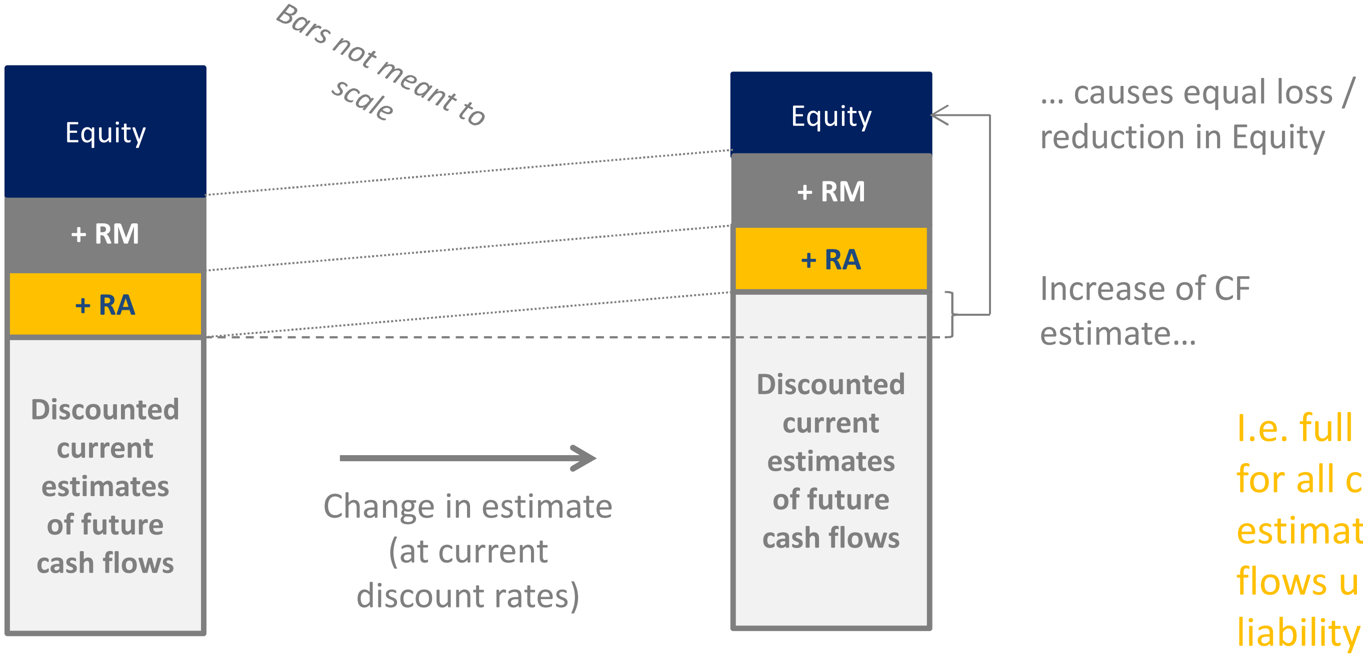
# Changes of Cash Flow Estimates

ED approach

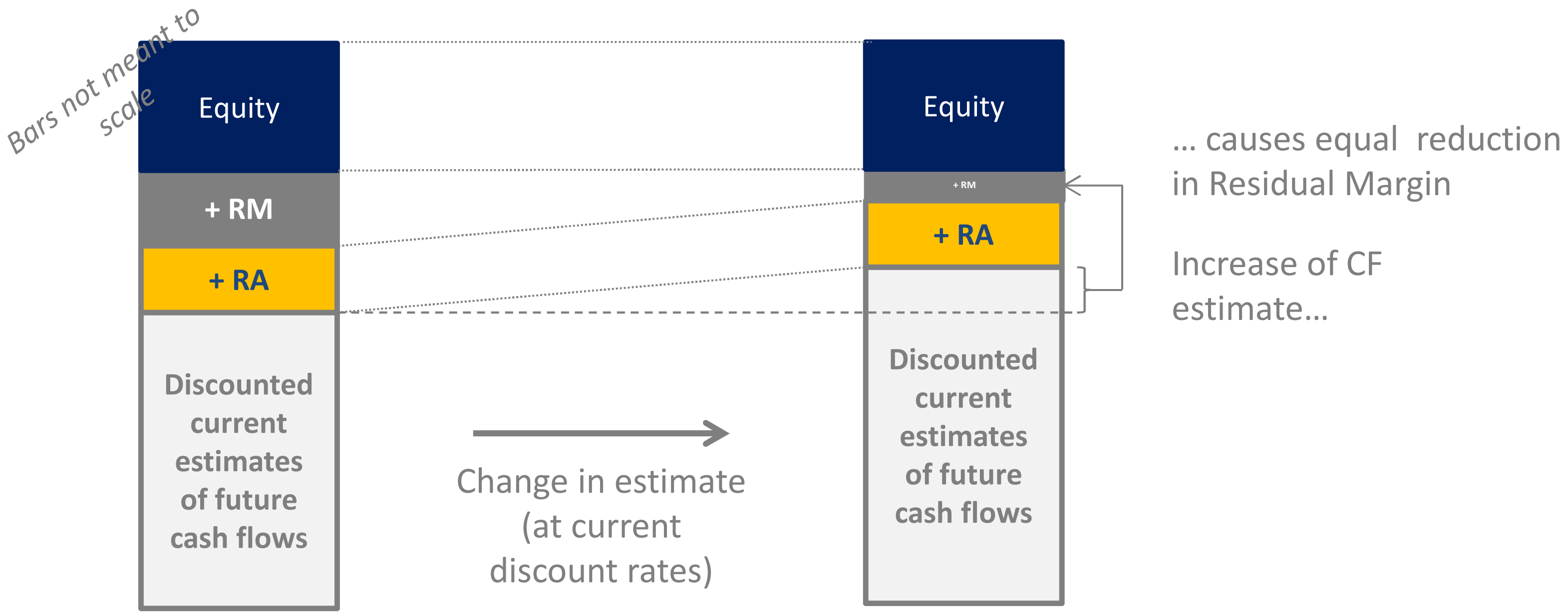



I.e. full P/L accounting for all changes in estimates of cash flows underlying the liability

- Main points of Criticism about ED proposal
  - Recognition of losses from changes in estimates even though a residual margin (stemming from gains at inception) is run-off
  - Different treatment of uncertainty on day 1 vs. day 2

# “Unlocking the Residual Margin”

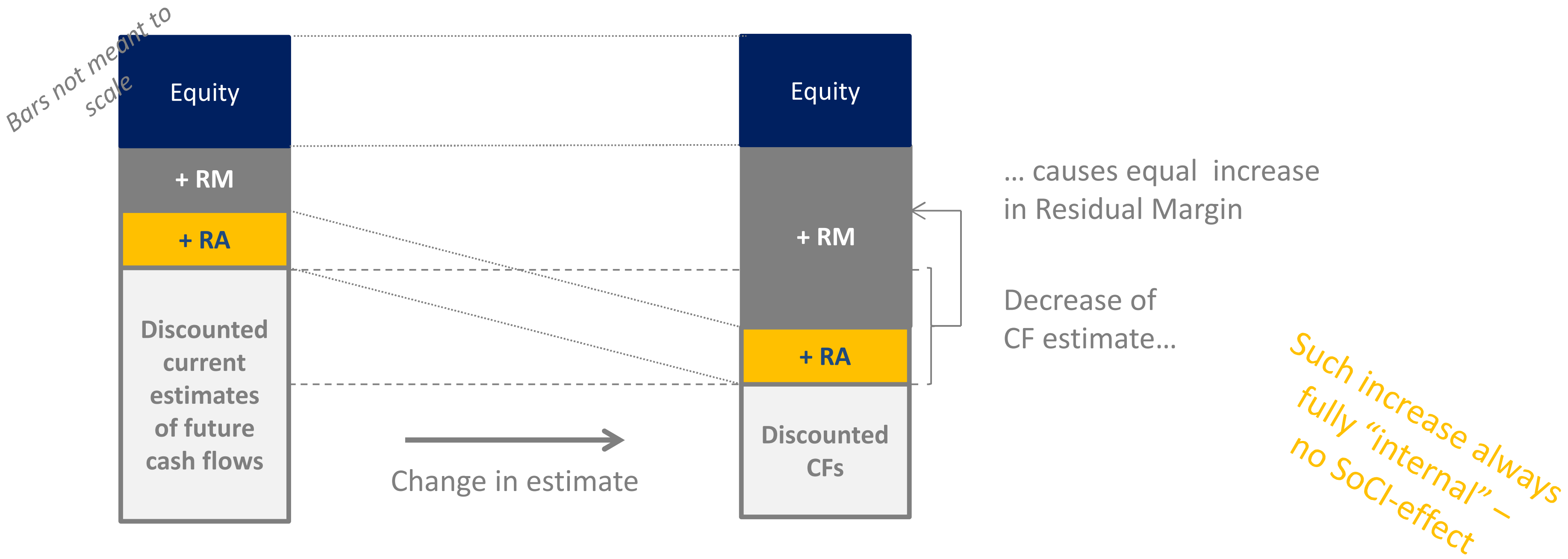
## RM acting as a buffer for change in CF estimate effects




- I.e. changes in estimates of cash flows
  - Become an “internal affair” (at least to some extent, see below);
  - That is, they don’t affect the liability balance on the B/S
- No RM buffering for changes of discount rates (-> OCI-Approach)

# Boundaries for Residual Margin (1)

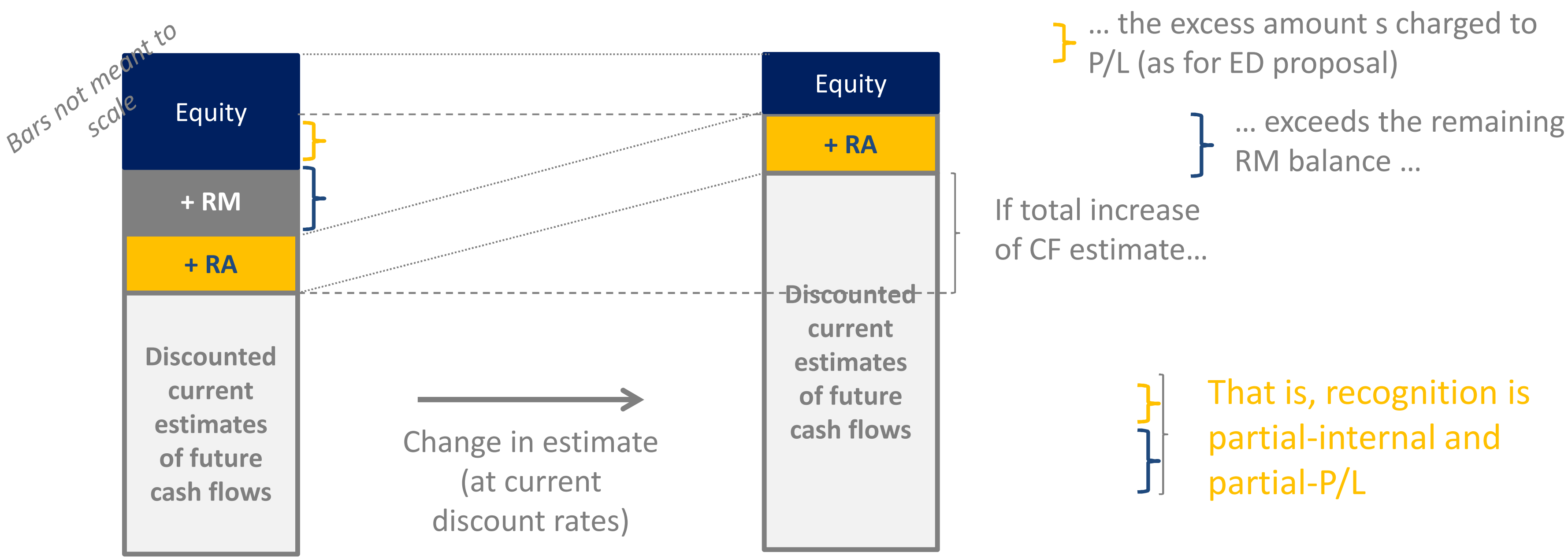
RM can grow without limitations




- There is <u>no</u> upper limit for RM increases, e.g. especially like
  - Initial RM balance; or
  - Initial RM balance after release to-date

# Boundaries for Residual Margin (2)

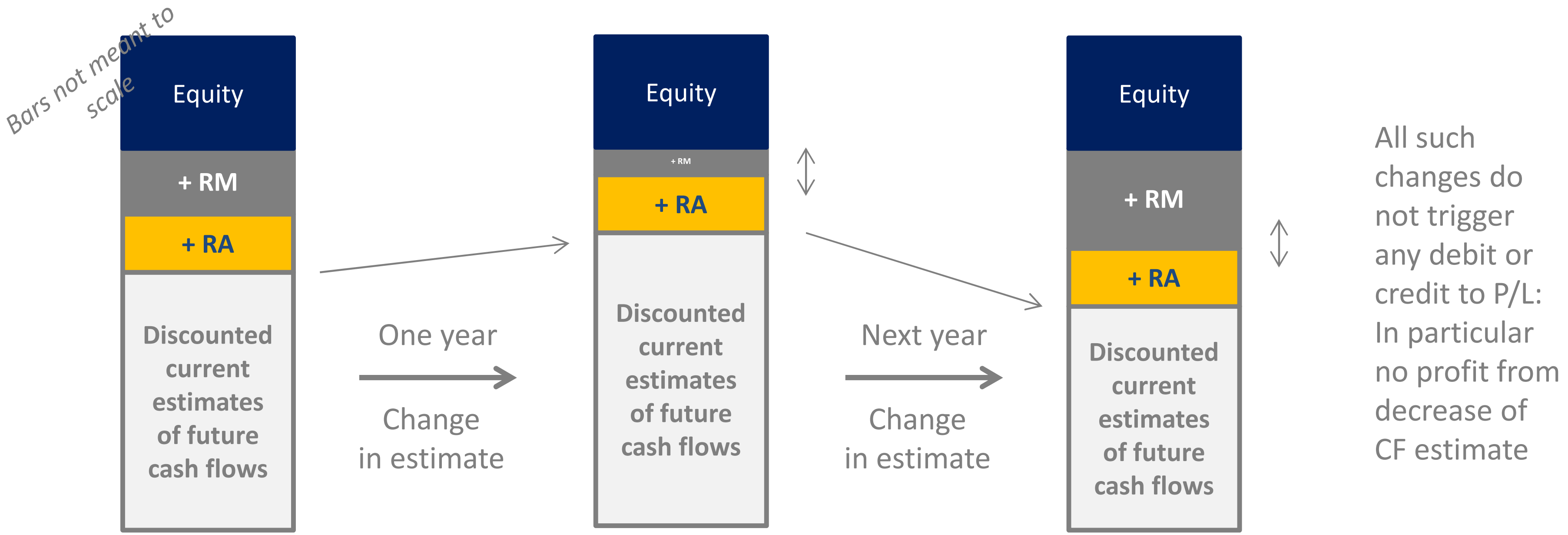
Residual Margin MUST NOT become NEGATIVE




- In other words, even after unlocking the RM there can still be losses from changes in estimates

# Questions regarding Unlocking RM (1)

## Mechanism for Reversal

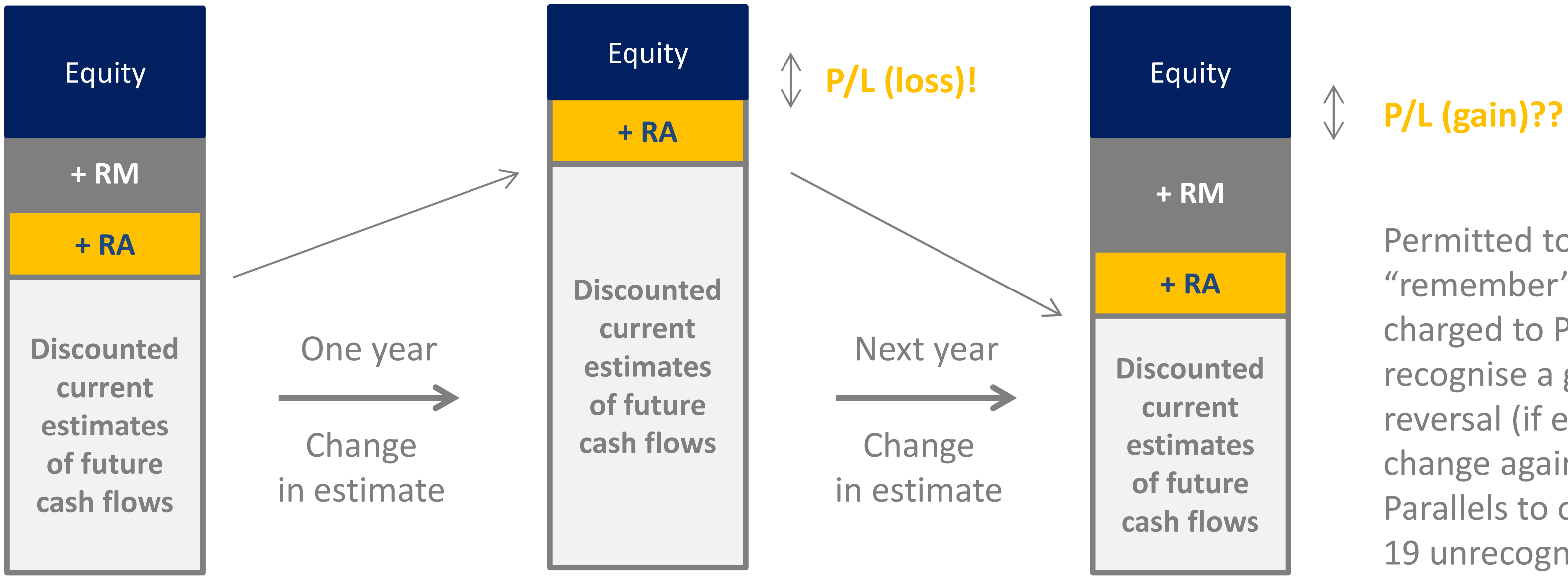



- Increase and decreases can be recognised year by year and generally compensate each other.
- BUT, …

# Questions regarding Unlocking RM (2)

Mechanism for Reversal

- … what happens if RM was used up and a charge to P/L had to be recognised before?:




Permitted to "remember" losses charged to P/L and recognise a gain for reversal (if estimates change again)? Parallels to old IAS 19 unrecognised gains and losses…

- Staff paper indicates option for P/L "reversal"
- Practicability? – would require some "shadow account"

# Questions regarding Unlocking RM (3)

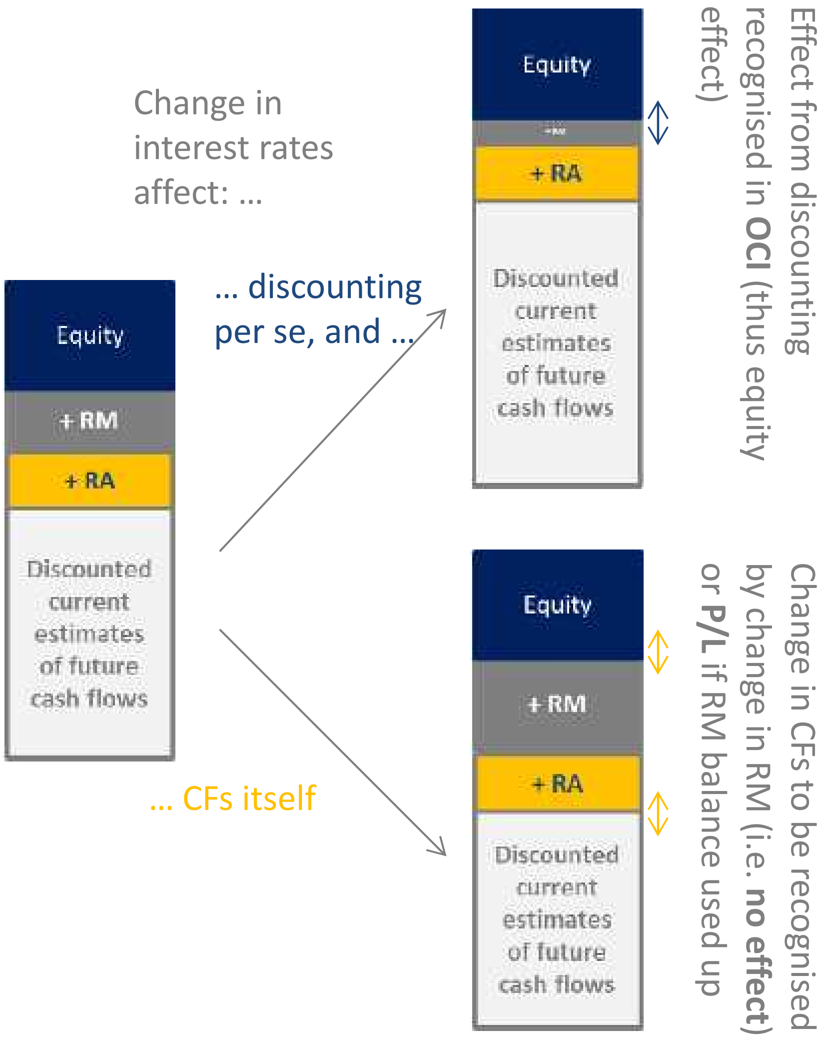
Mechanism for Reversal

- In addition to the unlocking for changes in estimates, the IASB made various other decisions that affect the RM
  - RM initially determined at the portfolio level (no more cohorts!)
  - No prescribed Unit of Account for release of RM (ditto)
  - Requirement to accrue interest to RM – based on locked in rates as per initial calculation
- Further the Board agreed to a generic requirement for releasing the RM in line with a so called “profit driver” fixed at inception
- However, this release guidance not yet linked to the Unlocking Decision
- **In other words, guidance yet to be developed by IASB.**

# Unlocking RM and OCI-Solution

All conceivable B/S and SoCI effects from same trigger

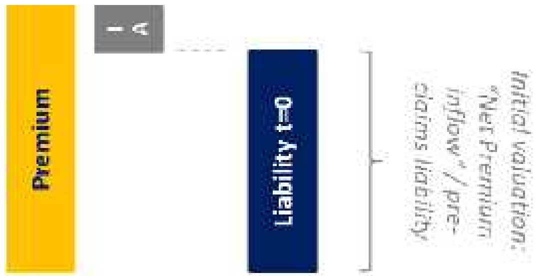
- Some (expected) CFs are likely to depend on interest rates:
  - Lapse related CF (assuming “reasonable” policyholder behaviour)
  - Crediting rates on certain products
- IASB tentative decisions explicitly and deliberately exclude the effect from such CF estimates from the OCI solution.
- Further complications result:



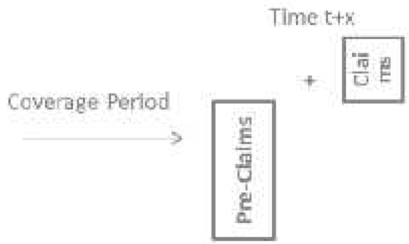
# Unlocking RM and PAA

## Applicability for "short term business"

Recall that for PAA business the RM is implicitly included in the pre-claims liability (i.e. no explicit RM):




During the coverage period, the initial liability is "transferred" into claims liability (or paid out) and profit is recognised.




Pre-claims liability is not subject to CF estimates (or, at most, by way of an onerous contract liability)

The claims liability is subject to regular and explicit CF updates.

For the main business that PAA is intended for (i.e. short term business, often entered into at the beginning of the year / Jan 1) the missing offset item RM is not an issue.
But the (voluntary) application of PAA should be double-checked for other situations, e.g. if fiscal year differs from main "coverage year".

# Unlocking Residual Margin

Some clarifications

- For avoidance of doubt: All RM adjustments from unlocking are prospective
  - I.e. RM is adjusted for current effect of changes
  - Or, equivalently, insurers need not go back and determine as-if-RM at inception

- Experience Adjustments (actual-to-expected-differences)
  - ED required recognition in P/L and this was left unchanged
  - I.e. unlocking the RM only applies to future CFs

- All changes in RA – even those triggered by changes in CF estimates – are still to be recognised in P/L

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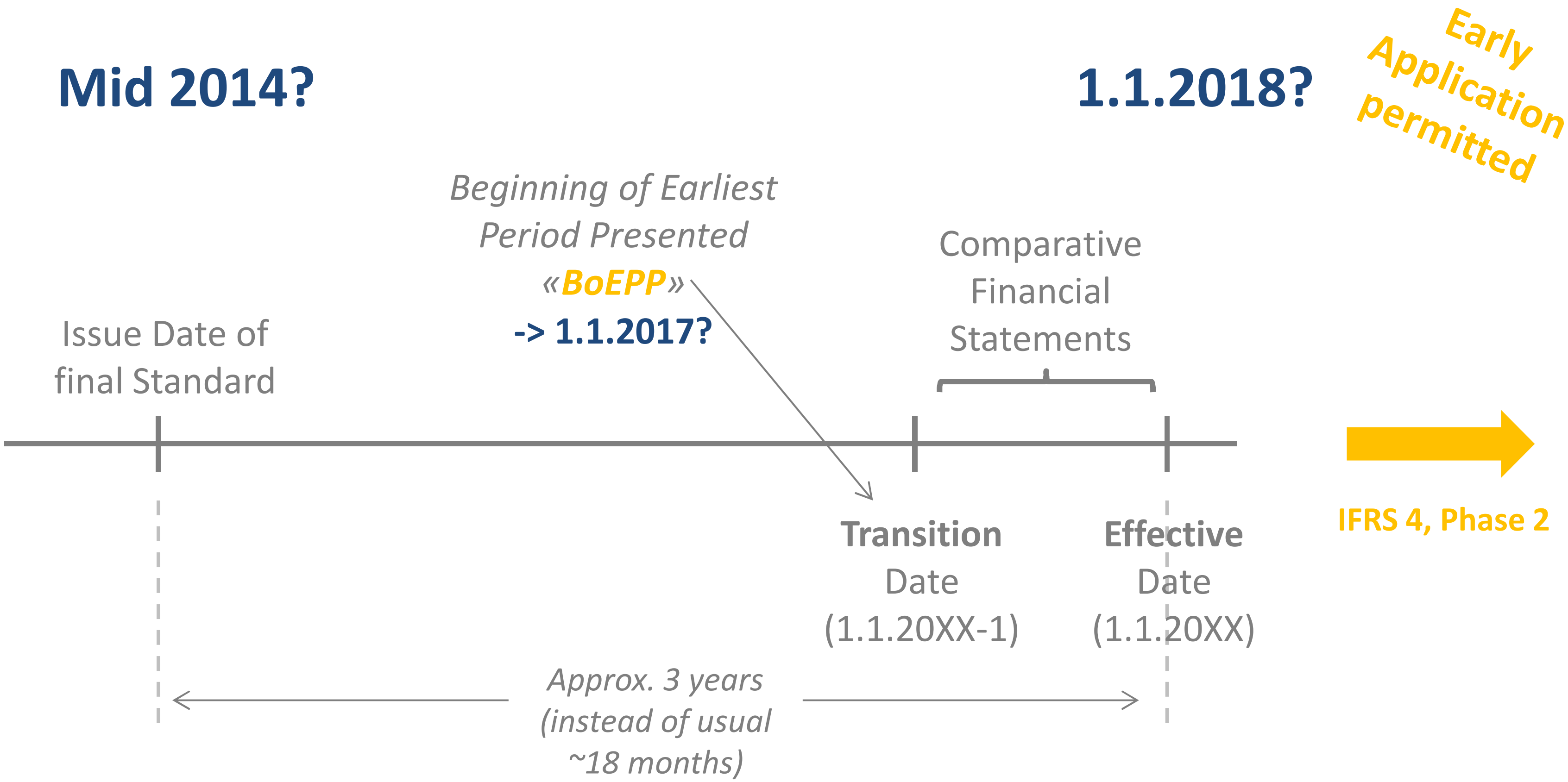
# Transition - Introduction

IASB Dates and Definitions



# Transition - Valuation

Valuation Exercise split into two parts

**In a first "step" the Present Value of Fulfilment Cash-Flows is determined:**

***Building Block Approach:***

**+ RA**

**Discounted current estimates of future cash flows**

At BoEPP:
Valuation at current best estimates for CFs and current interest rate according to IFRS 4 Phase 2 Methodology

***Premium Allocation Approach:***

Time t+x

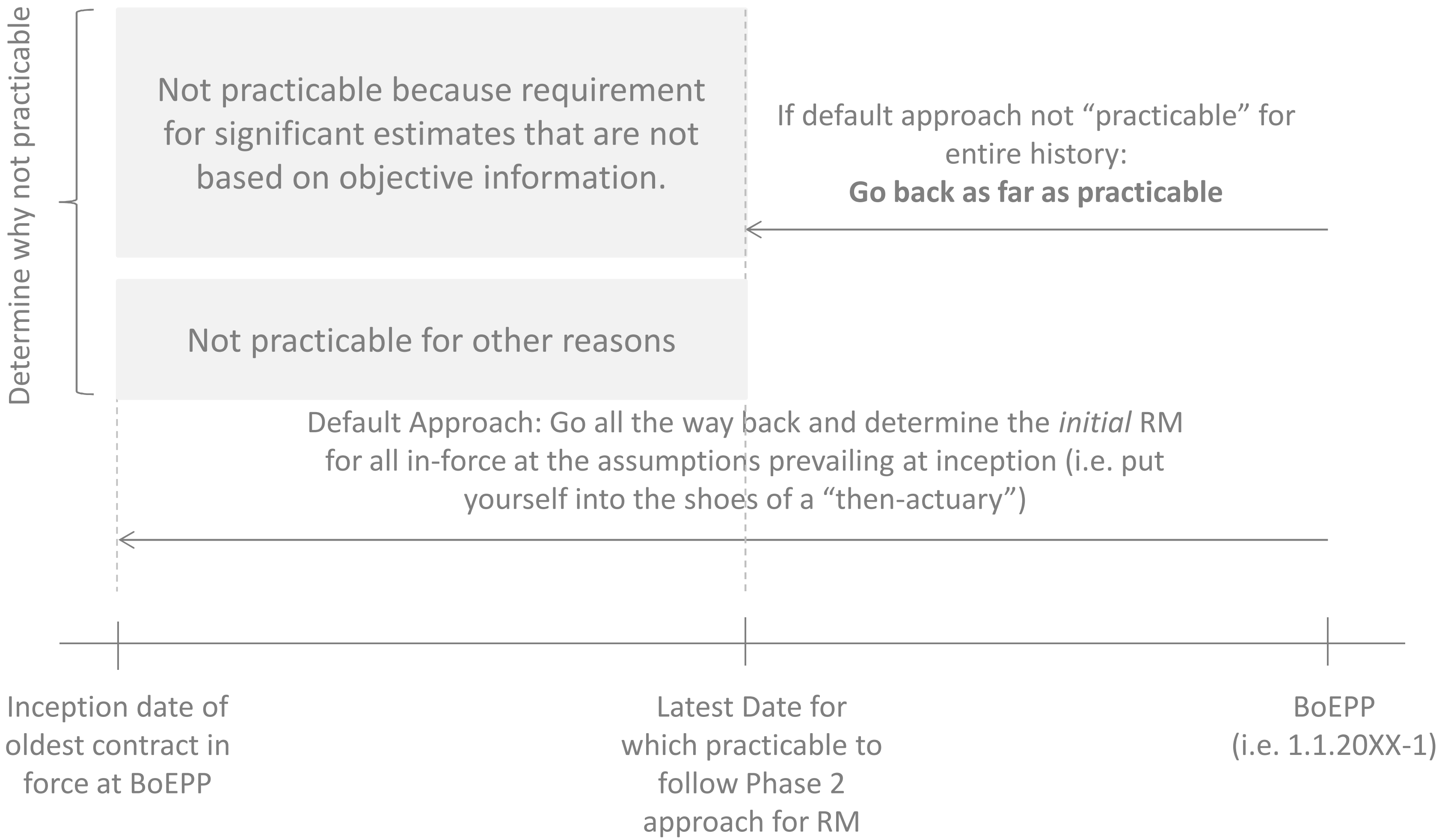
**Pre-Claims** + **Claims**

At BoEPP:
Similar approach, thereby indirect valuation of RM

Note: Valuation is based on Phase 2 guidance, in particular for acquisition expenses. Thus, no DAC etc. must be recognised.

# Transition – Residual Margin (1)

Determining the INITIAL Residual Margin for business written before BoEPP



# Transition – Residual Margin (2)

Different approaches for non-practicable business

Not practicable, because requirement for significant estimates that are not based on objective information.

→ *"Estimate what the margin would have been had the insurer been able to apply the new standard retrospectively"*: No "*exhaustive efforts*" required, but all objective information to be taken into account

Not practicable for other reasons

→ *"Measure margin by reference to the carrying value before transition"*

?

**Urgent need for application guidance:**
Is need to estimate management decision at inception sufficient to qualify for "other reasons"?

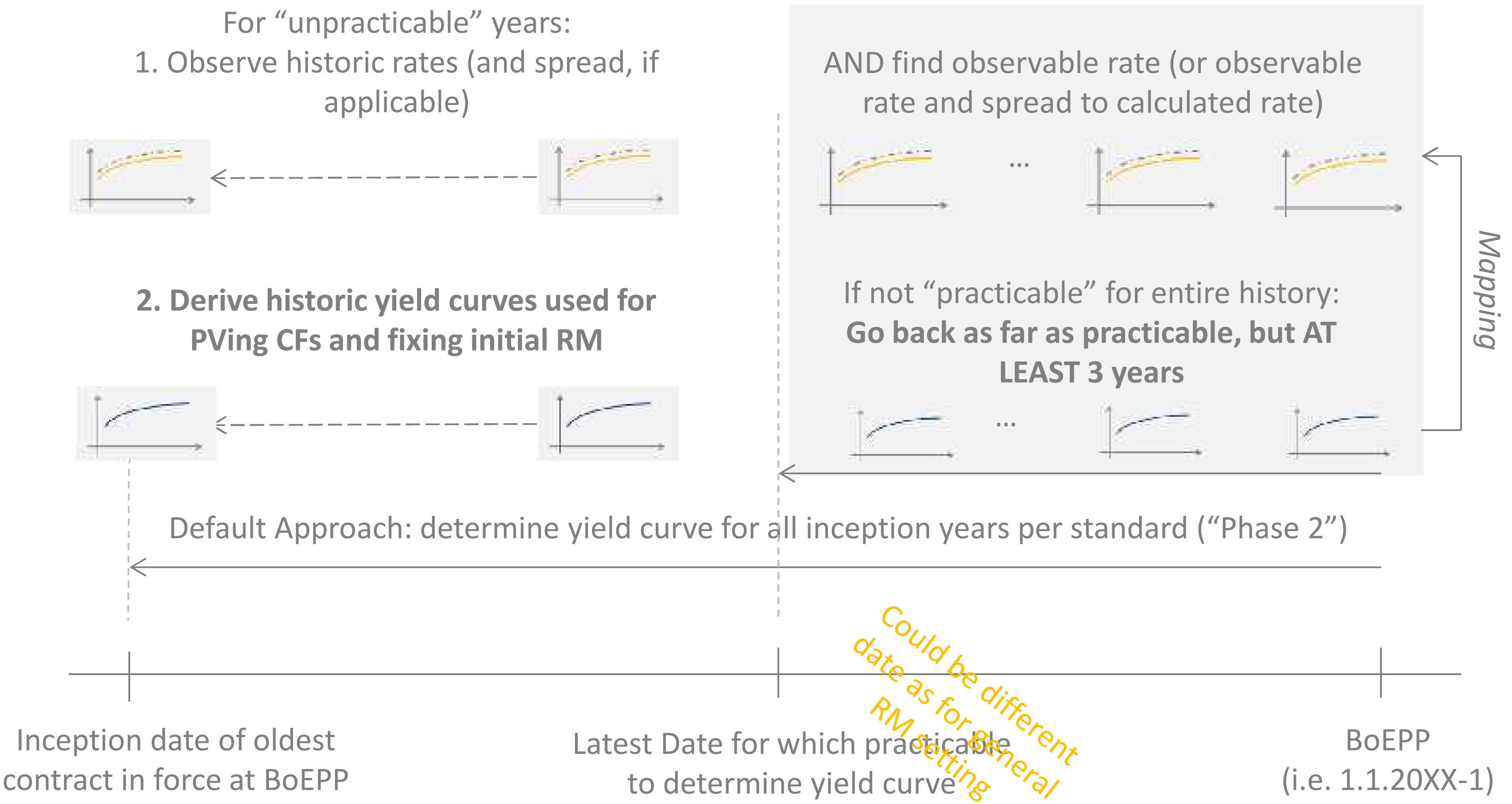
If so, **all participating business** might fall into that category?

Possibly, final standard will include constraints to the initial margin estimated [e.g. from average rates for business with exact model (where practicable)]

Guidance required for "*reference to carrying value before transition*"

# Transition – Residual Margin (3)

SEPARATE guidance for setting the discount rate (for initial RM calculation)



# Transition – Residual Margin (4)

Getting to the RM at BoEPP

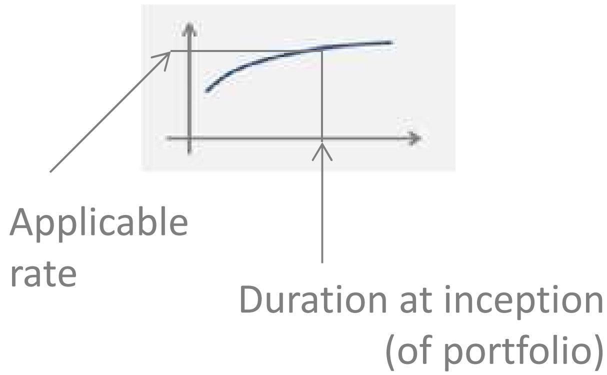
- Roll the Initial RM (for before-BoEPP-business) based on some methodology aligned with building block approach for RM
  - Based on profit driver
  - Possibly allowing for interest accrual, but possibly more simplified approach (up until BoEPP, only)

- No effects from Unlocking RM need to be recognised!
  - Virtually assume all differences in estimates of CF between inception / initial recognition and BoEPP were already known at inception
  - [Otherwise hindsight split between experience adjustment (i.e. historic P/L) and update of estimate (historic RM adjustment)]

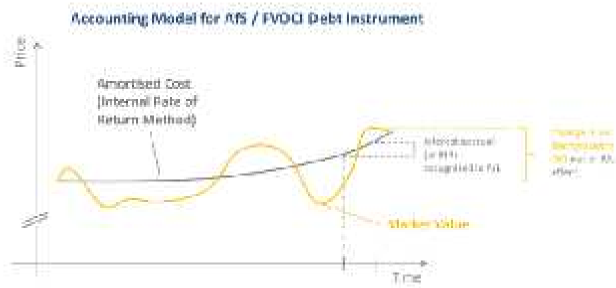
# Transition – Going Forward

BoEPP is only the starting point for business in-force by then

- For interest cost from unwind
  - Use one central rate:
  - Per inception year use rate from reference yield curve reflecting the duration of the liability




- Use that same ("duration") rate for rolling forward the liability and determining the OCI-effect from changes in interest rates




See also staff example presented above.

# Transition – Summary

Reasonable approach, but affected by breaking the model

- RM at transition is reasonable if not necessary
- Approach is sensible
- Some additional guidance required which may significantly affect the modelling
- But overall, transition approach clearly shows the down-sides of a lesser integrated model (i.e. P/L / OCI / RM recognition)

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# “Investment Component”

Definition and Example

- *“An **investment component** in an insurance contract is an amount that the insurer is obligated to pay the policyholder or a beneficiary regardless of whether an insured event occurs.”*

Example (cf. Agenda Paper 2G, March 2012 meeting):
Consider standard (mixed) endowment contract; 30 years term; lump sum of 100 payable upon death or 30-yr survival; standard cash surrender value (“Rückkaufswert”):

Investment Component equals expected present value of survival benefit and surrenders (after penalties, if any).

# “Distinct” Investment Components

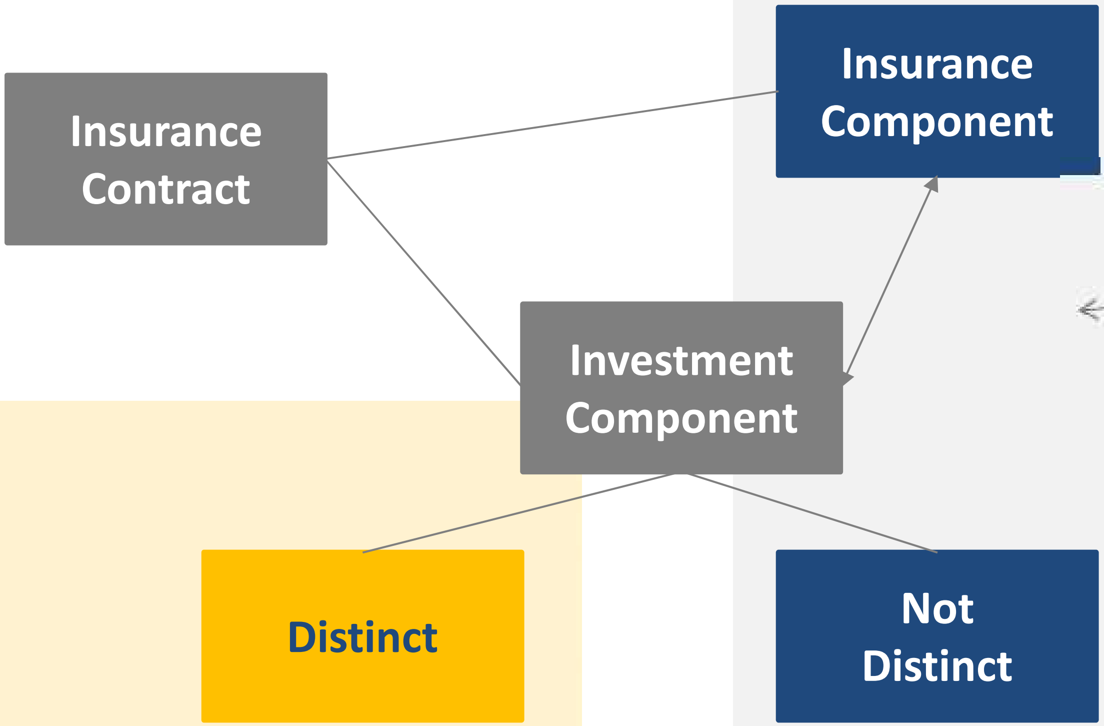
Further dimension

- *“An investment component is **distinct** if the investment component and the insurance component are not highly interrelated.”*

- *“Indicators that an investment component is **highly interrelated** with an insurance component include:*
  - *A lack of possibility for one of the components to lapse or mature without the other component also lapsing or maturing,*
  - *If the products are not sold in the same market or jurisdiction, or*
  - *If the value of the insurance component depends on the value of the investment component or if the value of the investment component depends on the value of the insurance contract.”*

# Accounting for Investment Components

Depends on nature




*Residual to Investment Component (of entire contract)*

*"Unbundling":*
*Similar to certain embedded derivatives and goods & services –*
***Different IFRSs apply***

*"Disaggregation":*
***B/S valuation according to Insurance Contract Standard ;***
***BUT subject to deposit accounting***

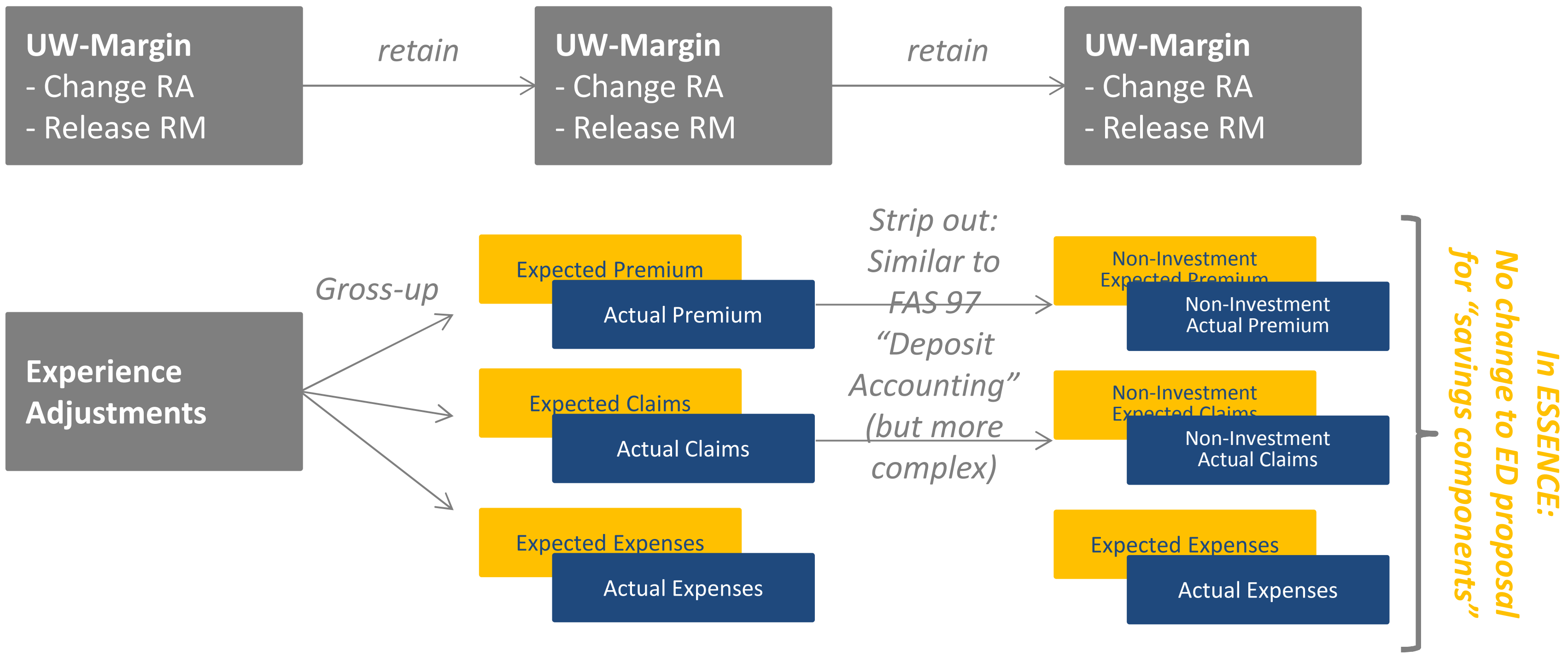
# Accounting for Premiums under BBA

Same same, but different?!

*ED Proposal - "summarised margin approach", including amongst other:*

*Oct. 2011 Tentative Decision would generally include premiums, claims in SoCI:*

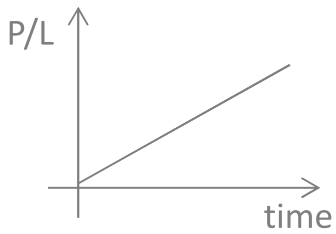
*March 2012 Tentative Decision would preclude investment component related amounts:*



# Earned Premium Approach

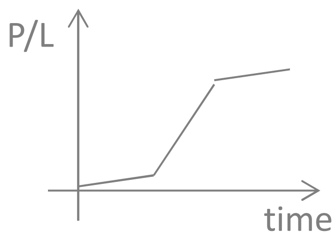
## Alignment with Revenue Recognition – totally unusual for life insurance

*ED Proposal for PAA – Premium is recognised (in P/L) as earned, e.g.:*




✓ *(consistent with current model)*

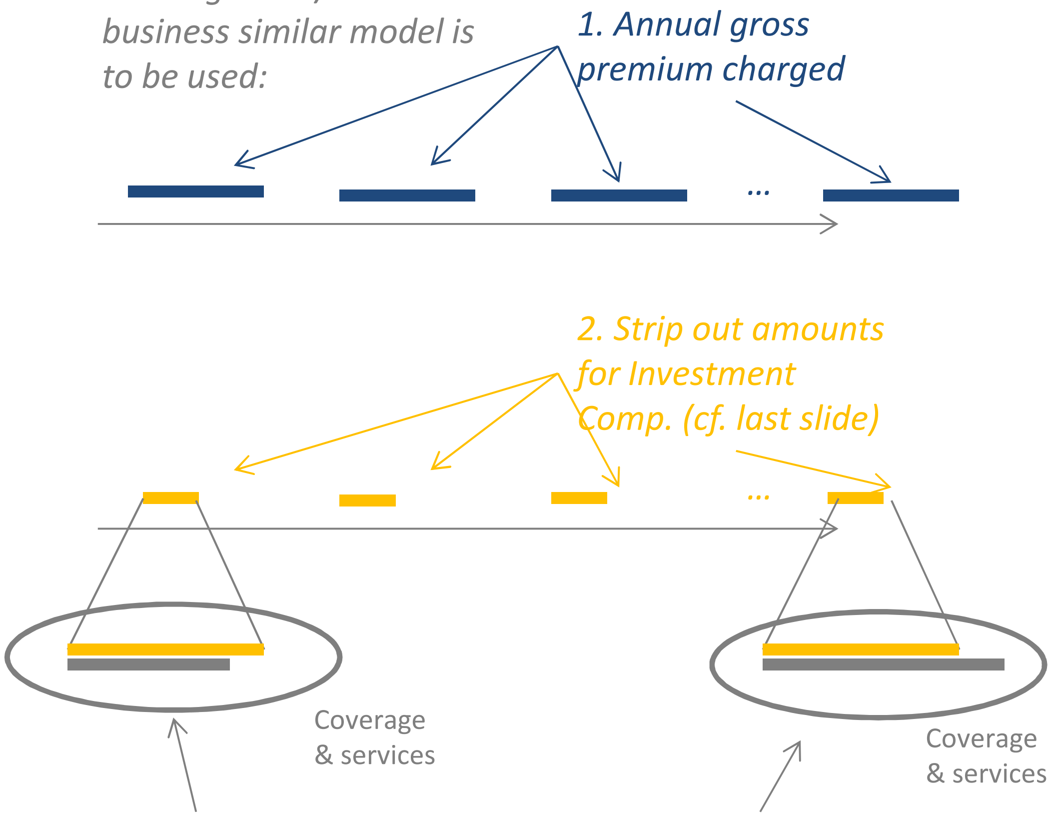
*or*




✓ *(consistent with current model)*

*(e.g. hurricane cover / seasonal)*

*For long-term / BBA business similar model is to be used:*




*3. Each period analyse the actual level of service provided and recognise premium relative to that portion :*
*On an expected PV basis, allowing for updates of estimates*

*DONE!*

# Premium Accounting

Much Ado **for** Nothing

- IASB does not want *deposit premiums* to be recognised on the face of the SoCI – Period.
- Resistance is futile…
- Is it necessary?!?: All Cash-Flows visible in Disclosures – that is, not “needed” on the face of the B/S!
- In the course of the debate, revenue accounting became the model-of-choice for premiums
  - Appropriate and current standard for short-term business
  - But: Hardly practicable (or sensible) for long-term business

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# Acquisition Expenses

No significant news (but difference to US-GAAP)

- Overall mechanics remain unchanged:
  - (Certain) acquisition related expenses are reflected in Cash Flows
  - Thereby increase of CFs
  - And decrease of Residual Margin, i.e. decrease of liability going forward; recognition over coverage period
  - In essence, no explicit asset ("DAC") but lower liability
- Some modification to eligibility criteria
  - Determined at portfolio level (i.e. no longer single contract)
  - All direct costs including those for unsuccessful efforts
  - But excluding indirect costs (software, rent, depreciation)
  - Pre-coverage period acquisition costs to be included in contract's portfolio cash flows

# Reinsurance

Various clarifications to ED proposals

- Classification – clarification of significant risk
  - “*reinsurance contract is deemed to transfer significant insurance risk if substantially all of the insurance risk relating to the reinsured portions of the underlying insurance contracts is assumed by the reinsurer*”
  - Even if the assuming company is not exposed to a loss (because of portfolio effects / law of large numbers)
- Clarification of presentation for cash flows resulting from / as result of
  - “Loss sensitive features”(*contractual features affecting the amount of premiums and ceding commissions that are contingent on claims or benefits experience*)
  - Commutations

# Reinsurance

Same model selection approach – Practicability issue for umbrella covers

- Reinsurer evaluates which model to use in the same way an insurer would evaluate direct insurance contract
  - That is select BBA or PAA model
  - PAA not permitted if claims estimates likely to change before occurrence of claim; or significant judgement needed for allocating premium to obligation

- Cedent must
  - use same model for R/I contract that s used for underlying business
  - Split R/I contract if underlying business modelled by both PAA and BBA

- Practicability for (non-proportionate) umbrella covers??

# Reinsurance Ceded – ED Measurement (1)

## Building Block Approach – PV Fulfilment Cash Flows

- Essentially, a “mirror-image” model:
  - Current best estimates
  - PV Fulfilment CFs derived from cedent’s perspective (note the <u>sign convention</u>!):
  - + Cash inflows (e.g. claims reimbursed)
  - - Cash outflows (e.g. premium ceded, after allowance for ceding commission)
  - + Relief from Risk Adjustment

- All after allowance for reinsurer’s non-performance risk on a expected value basis

Relevant for initial R/I Residual Margin:

***Positive PV Fulfilment CFs***

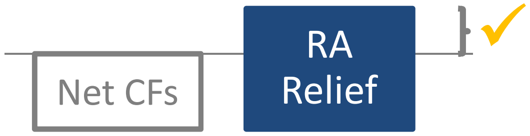

or

***Negative PV Fulfilment CFs***

# Reinsurance – ED Measurement (2)

## Building Block Approach – Residual Margin at Inception

***Positive PV Fulfilment CFs***




- Positive PV fulfilment value at inception gets recognised
  - I.e. recognise an asset / gain
  - Essentially balancing off a “similar” loss if underlying business was entered into simultaneously and not profitable

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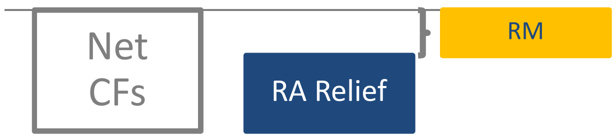
***Negative PV Fulfilment CFs***




- Negative PV fulfilment value at inception gets eliminated by “R/I-RM”
  - RM is an asset
  - No loss at inception

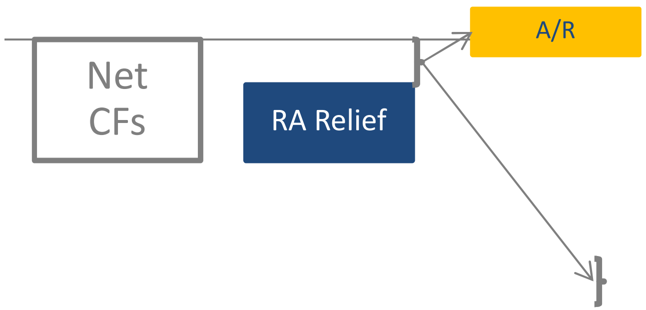
# Reinsurance – Board Decision

Current model breaks symmetry

***Positive PV Fulfilment CFs***


- Positive PV fulfilment value at inception gets eliminated by “R/I-RM”
  - No recognition of gain
  - No balancing off

***Negative PV Fulfilment CFs***




- Negative PV fulfilment value:
  - **Reinsurance coverage is for future events** -> recognise R/I receivable and recognise cost over time RM is an asset
  - Similar to ED proposal
  - **Reinsurance coverage is for past events** -> immediate loss

# Reinsurance

General amendments to the model

- Reinsurer's non-performance risk
  - Allowed for according to impairment Model for financial instruments
  - Full consideration of e.g. collateral, if any, required
  - Explicit allowance of losses from disputes
- Clarification for ceded portion of Risk Adjustment
  - Represents the risk being removed through the use of reinsurance
  - E.g. by calculating gross RA – net RA
- Recognition of Reinsurance Asset:
  - Not before underlying (direct) contract is first recognised
  - Unless "amount paid under the reinsurance contract reflects aggregate losses of the portfolio of underlying contracts covered by the reinsurance contract"

# Substantial Contract Amendments

Additional guidance regarding derecognition

- A contract modification is *substantial* if it changes at least one of the following:

| Applicable IFRS (i.e. in Scope of IFRS 4) | Portfolio the contract is in | Measurement Model (i.e. BBA or PAA) |
|---|---|---|

- A substantially amended contract is **derecognised** and a **new contract is recognised**. The gain / loss upon derecognition is derived from the general "consideration – carrying value" approach

- For amended contracts still subject to insurance model, consideration is replaced by entity specific valuation of the new contract

| Gain / Loss upon "replacement" | = | Hypothetical Price charged to PH for amended contract | – | Carrying Value of Contract before amendment |
|---|---|---|---|---|

# NON-Substantial Amendments

Specific guidance for benefit increases

- For non-substantial amendment reducing the insurer's obligation (decrease of benefit):
  - Derecognise related portion of obligation
  - Including the related portion of the Residual Margin

- For non-substantial amendment increasing the insurer's obligation (further benefits to policyholder):
  - Treat modification as if amendment was a new contract
  - I.e. determine Residual Margin as for a new stand-alone contract
  - No effect on the original contract

# Portfolio

Main Unit of Account with amended definition

- A portfolio is defined as a set of contracts that are:
  - subject to similar risks and priced similarly relative to the risk taken on; and
  - managed together as a single pool.

- Portfolio is main unit of account

RM at Inception

Acquisition expenses

… and Measurement

Onerous Contract Test

Cash Flows…

# Risk Adjustment

Concept unchanged

- IASB retained explicit Risk Adjustment
- Slight amendment of definition
- It dropped the ED-restriction to a certain set of techniques
- **No longer is a Unit of Account prescribed for RA (that is, diversification effects no longer limited to portfolio level)**
- BUT: Board retained requirement for translation of RA into VaR level (“confidence level equivalent”)

# Agenda

Introduction

The ED Model (quick recall)

The «OCI-Solution» & Asset-related Cash Flows

Unlocking the Residual Margin

Transition

Changes in Presentation

Miscellaneous

**Outlook and Q&A**

# What comes next?

Agenda

- Re-Exposure (Draft) in 1H2013
  - Feedback being sought only on a limited range of questions (see following slides)
  - Comment period: Last chance for feedback
  - Practitioners should make their comments!

- Final standard as early as by mid 2014?
  - See transition section for time-line
  - See also guidance regarding Comparatives

# Re-Exposure Draft – Questions

September 2012 Statement by IASB Chairman Hans Hoogervorst

- The targeted questions in the new Exposure Draft will relate to proposed requirements for:
  - Treatment of participating contracts
  - Presentation of premiums in the statement of comprehensive income
  - Treatment of the unearned profit in an insurance contract
  - Presenting, in other comprehensive income, the effect of changes in the discount rate used to measure the insurance contract liability; and
  - The approach to transition.
- I.e., no specific questions planned regarding Risk-Adjustment or whether preference for Single Margin / Residual Margin
- Option for other / general comments as well?!

# Participating-Business Question

Some comments reflecting personal view

- Treatment of participating contracts
  - Is Mirroring practicable?
  - Is it meant to be a joint-model, i.e. to be applied in parallel to the standard model for the guaranteed CFs of contract?
  - Is such joint-model practicable at all?

# Premiums-in-SoCI Question

Some comments reflecting personal view

- Presentation of premiums in the statement of comprehensive income
  - IASB does not want to see “savings premiums” in SoCI
  - So they are not in there…
  - Cash Flows will be visible in Disclosures anyways (as will benefit payments)
  - Banks cannot report deposits in SoCI and nonetheless when it was interesting to analysts it was the first number they looked at
  - In other words, a lot of nitty-gritty work that achieves nothing (on the face of the SoCI) but that may not be necessary anyways…

# Unlocking-RM Question

Some comments reflecting personal view

- Treatment of the unearned profit in an insurance contract
  - Refers to Unlocking the RM
  - Probably the least problematic among the fundamental model changes
  - However (as of October 2012), guidance pending on how to release RM after unlocking
  - And clarification for treatment of positive adjustments to Cash Flows after full "RM-consumption" by previous negative adjustments

- For life insurers: Creates deviation between MCEV and IFRS

# OCI-Solution Question

Some comments reflecting personal view

- Presenting, in other comprehensive income, the effect of changes in the discount rate used to measure the insurance contract liability:
  - Operationally challenging
  - Conflict between transition business and future NB
  - Effort only justified if OCI is treated as “Second Class Income Item” (will analysts look at an insurers OCI like that?)
  - Forcing investments into FVOCI

# Transition Question

Some comments reflecting personal view

- The approach to transition
  - Complexity only due to Residual Margin measurement (at transition)
  - Necessary in one way or the other as long as RM is part of the Building Block Approach
  - Approach to transition is reasonable, given the overall model
  - But clarification needed regarding estimation (how far to go back, in particular for participating business)
  - And: approach adds yet an other interest rate to determine interest cost
  - By the way: Why not use some MCEV measure (e.g. VIF) of in-force at transition date?

# Summary – Overall Industry Perspective

What has been achieved?

**B/S / Equity Volatility** → **SOCI Presentation**

**B/S / Equity Volatility**

- **Still based on current CF and discount rates**
- J Limited relief from RM Unlocking
- K Mirroring for Participating business

**SOCI Presentation**

- J Separation of discount updates into OCI
- **BUT will analysts really care?**

**Premium Presentation**

- K PAA premium still in P/L
- **NO BBA “savings premium” (incl. traditional business)**
- **Earned Premium**

**Model Transparency**

- **Hyper complex model blending various concepts**
- **Who will be able to understand and explain results?**

# Is it all worth it?

"We need to talk" – says the actuary to the accountant

- Do the model amendments achieve something substantial?
- Are the achievements worth the complexity?
- Will preparers an users feel comfortable with such complexity / the resulting financials?
- In other words, do we want to turn back the wheel? Whereto?:
  - ED
  - ED with OCI-solution (and Unlocking RM)?
  - Elsewhere in between ED and today's model?

# The Actuarial Perspective

What does that mean?

- We, as a profession, should shed a light on what the model means in practice
- Discuss the implications with Finance / CFO function
- IFRS 4 is a joint project of actuaries and accountants
- Goals may differ, but…
- … there is no point in surrendering to the monster that was created during the past 24 months!

# Q&A

# Thank you!

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