# Solvency II: Hot topics for life insurers from the latest draft level 2 and level 3 measures

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# Solvency II Framework



Solvency II Framework

| Pillar 1 | Pillar 2 | Pillar 3 |
| --- | --- | --- |
| Measurement of assets, liabilities and capital | Governance, risk management, supervisory review | Disclosure requirements (QRTs, SFCR, RSR) |

# Building blocks and hierarchy



Solvency II Framework

| Pillar 1 | Pillar 2 | Pillar 3 |
|---|---|---|

Level 1 - Directive

Level 2 – Delegated Acts

Level 3 – Guidelines and Implementing Acts

# Recent Level 2 and 3 measures



Solvency II Framework

| Pillar 1 | Pillar 2 | Pillar 3 |
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L2: - Draft Implementing Measures (Nov. 2011, pre-consultation draft)

L3: - Guidelines and Recommendations on the Actuarial Function

- Actuarial Guidelines and Recommendations
  - EIOPA-FinReq-11/013 (pre-consultation draft)
- ORSA
  - Guidelines on ORSA (EIOPA-CP-11/008) (Nov. 2011 , public)
- Reporting
  - QRTs, Guidelines on Narrative... (EIOPA-CP-11/009a) (Nov. 2011, public)
  - QRTs for Financial Stability Purposes (EIOPA-CP-11/011) (Dec. 2011, public)

# Health Warning



All comments here are based on the

draft Level 2 and 3 texts

These are still subject to change!

# Agenda



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# Contract Boundaries



- Technical provisions based on future cashflows
- Contract boundary key determinant of future cashflows

<u>Two approaches</u>

**Industry & Groupe Consultatif**

- Advocates economic approach
- Model optionality
- More consistent with Directive
- Consistent with IFRS

**EIOPA**

- Favours contractual approach
- Set rules for contract boundary
- More objective
  - easier to harmonise
  - easier to supervise
- Economic approach
  - too subjective
  - more complex to supervise

# Contract Boundaries – Contractual Approach



Q1. Where does the contract boundary lie?

Q2. Once established, what does contract boundary mean?

A. Perimeter for future cashflows

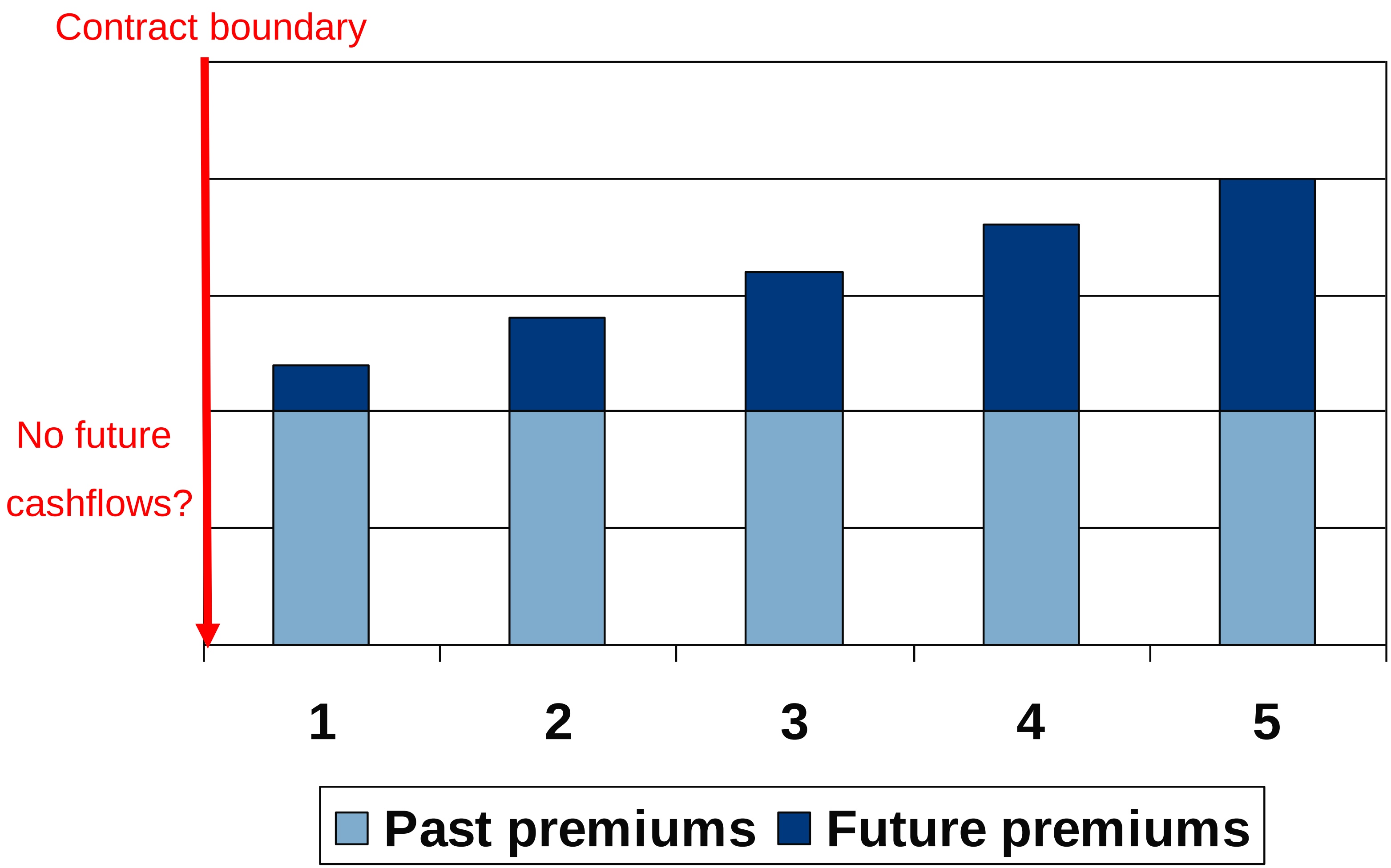
OR

B. Perimeter for future premiums

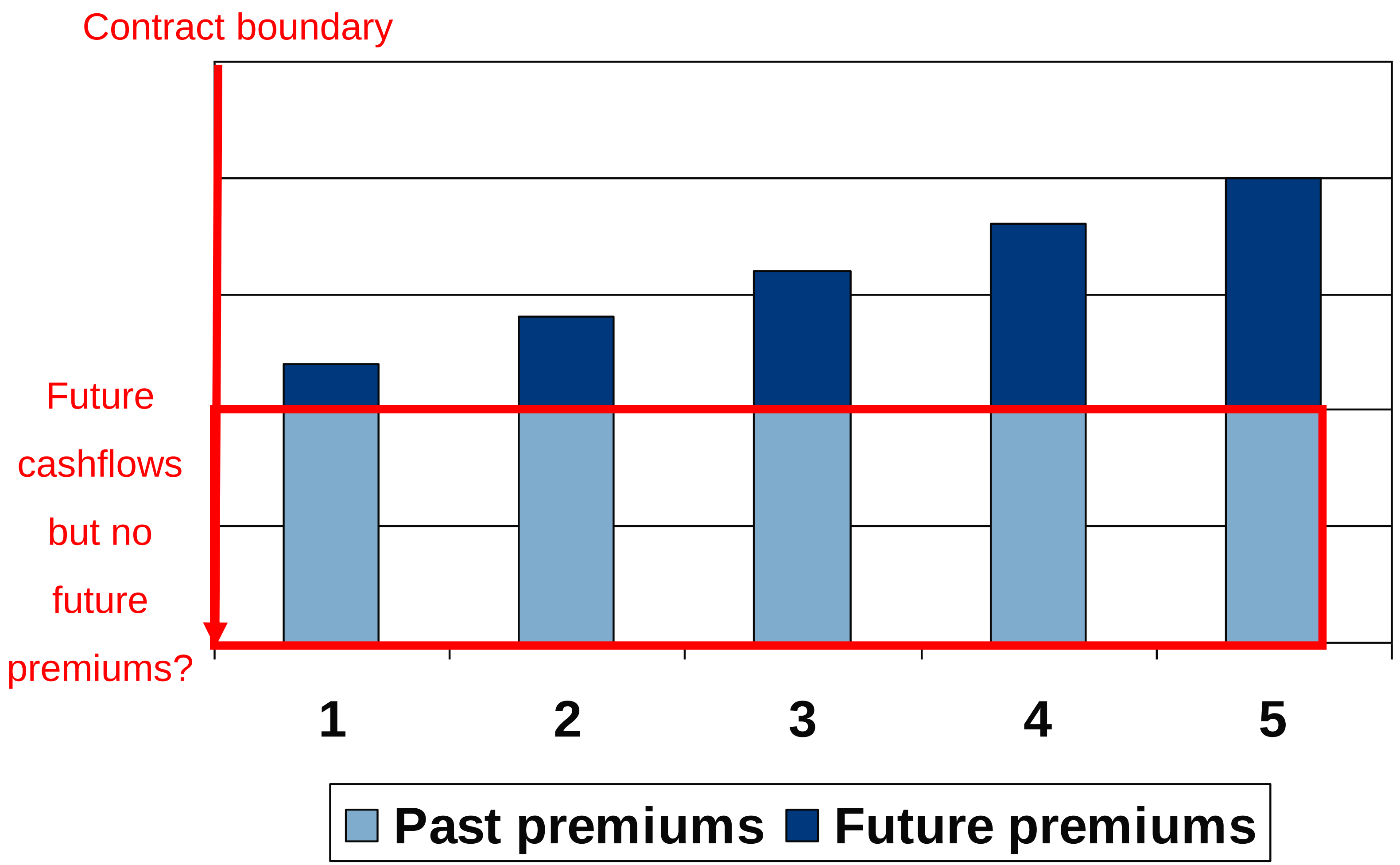
- Some examples on following slides

- For profitable business, more constrained perimeter means
  - lower future profits i.e. lower VIF
  - higher technical provisions

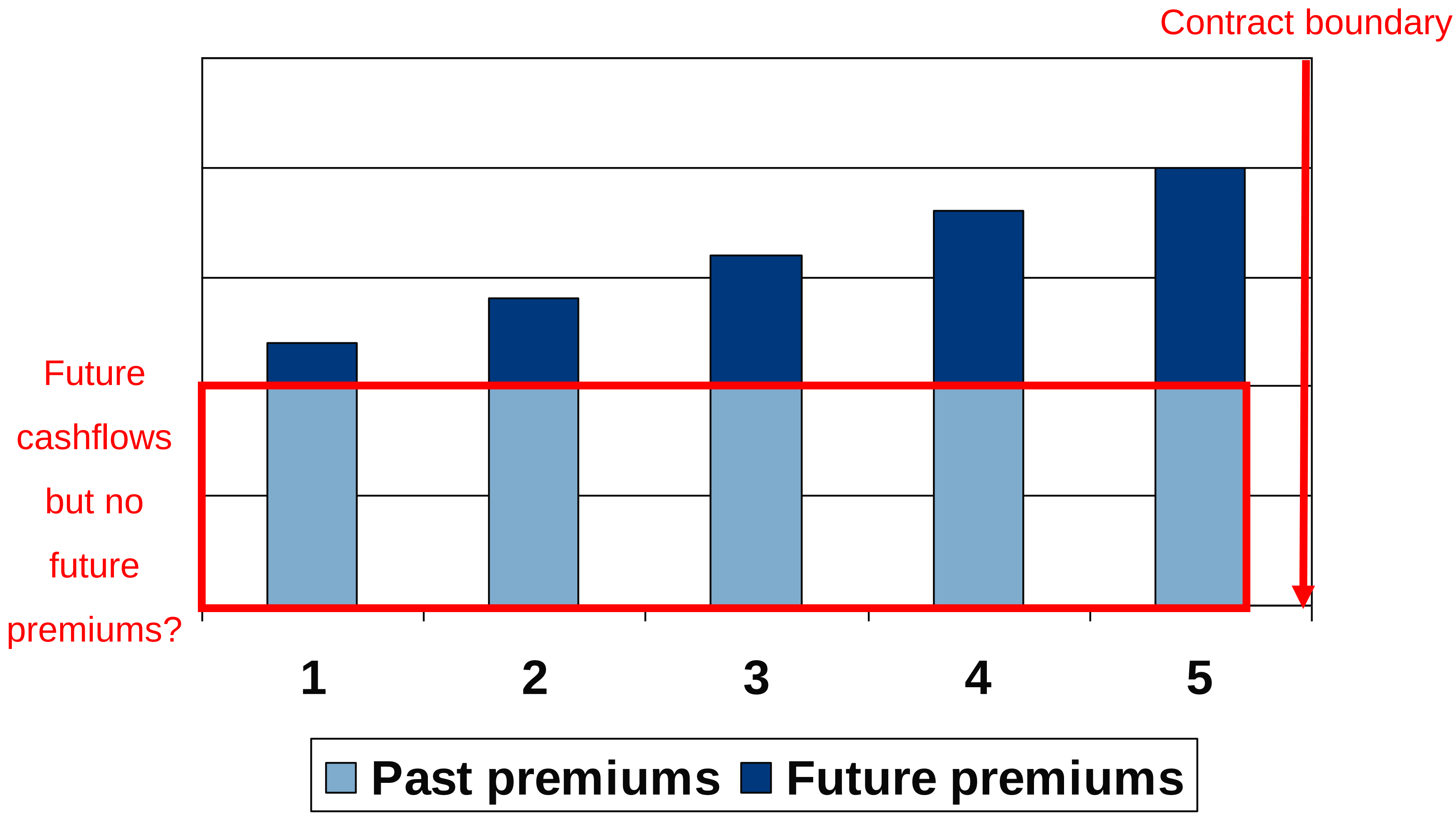
# Example A – Immediate Contract Boundary



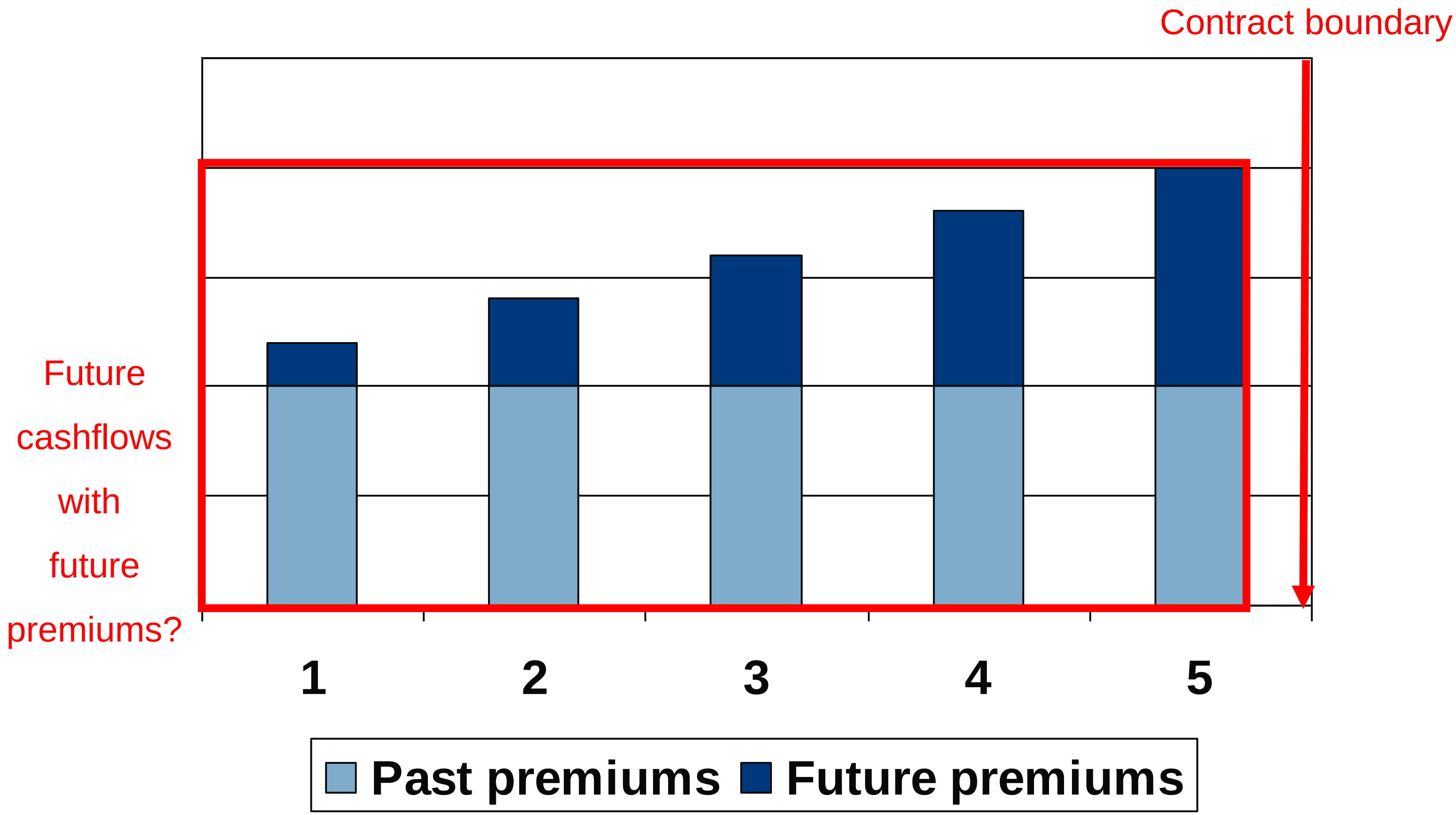
# Example B - Immediate Contract Boundary



# Example C – Future Contract Boundary



# Example D – Future Contract Boundary



# Latest Level 2 – contract boundary



a) The future date at which the company has a unilateral right to terminate the contract, reject premiums payable, or amend premiums or benefits in a way that the premiums fully reflect the risks

→ Any obligations provided after this date are outside contract boundary (unless policyholder can be compelled to pay the premiums)

b) Regardless of (a), where the contract does not contain either (i) insurance risk and (ii) financial guarantees any obligations related to future premiums are outside the boundary (unless policyholder can be compelled to pay the premiums)

- Test also applies to part of a contract – unbundling approach
- Restrictions which have no discernible effect shall be ignored

# Fully reflect the risks



- Test applies at portfolio level i.e. where a company has the unilateral right to amend premiums or benefits at a portfolio level so that the premiums of the portfolio fully reflect the risks of the portfolio

  – Only where there is no scenario under which the amount of benefits and expenses payable exceeds the amount of premiums payable

  – Where an individual risk assessment is undertaken at contract inception, and that assessment cannot be repeated before amending premiums or benefits, then determination of whether premiums fully reflect risk is made at contract level

# Possible Interpretation



- Typical Guaranteed Term Assurance
  - Contract boundary is maturity date
  - Cashflows projected to maturity date
  - Can allow for future premiums

- Typical Convertible Term Assurance
  - Contract boundary is conversion date
  - Cashflows projected to conversion date
  - Can allow for future premiums up to conversion date

# Possible Interpretation



- Unit-linked savings/pensions contract with reviewable charges
  - Does reviewability of charges mean premiums or benefits can be amended to “fully reflect the risk”?
    - If so, contract boundary appears to be immediate and therefore no projection of cashflows i.e. technical provisions are nil (assumes continuous reviewability)
  - However, “fully reflect the risk” test seems to be a high hurdle
    - Must be no scenario under which the amount of benefits and expenses payable exceeds the amount of premiums payable
    - If test is ‘failed’ then contract boundary appears to be the term specified in the policy conditions (maybe whole of life)
  - Does ability to amend charges correspond to “*ability to amend the premiums or benefits payable under the contract in such a way that the premiums fully reflect the risks*” in any event?
    - If not, then contract boundary would not appear to be immediate
  - Future premiums are not allowed in any case

# Possible Interpretation



- Single premium investment contract with reviewable charges
  - Similar considerations to unit linked savings with reviewable charges
  - Potentially nil technical provisions depending on interpretation!

- Reviewable unit linked protection contracts
  - May need to unbundle into savings and protection components
  - Contract boundary may be the next review date
    - If “fully reflect the risks” test is satisifed
    - What if mortality charges can be reviewed at anytime?
  - Assessment may be at policy level rather than portfolio level

# All clear?



- It's clear that interpretation will be very important!

- Level 3 guidelines are being developed
  - Expected to contain comprehensive examples

# Agenda



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# Long-term guarantees

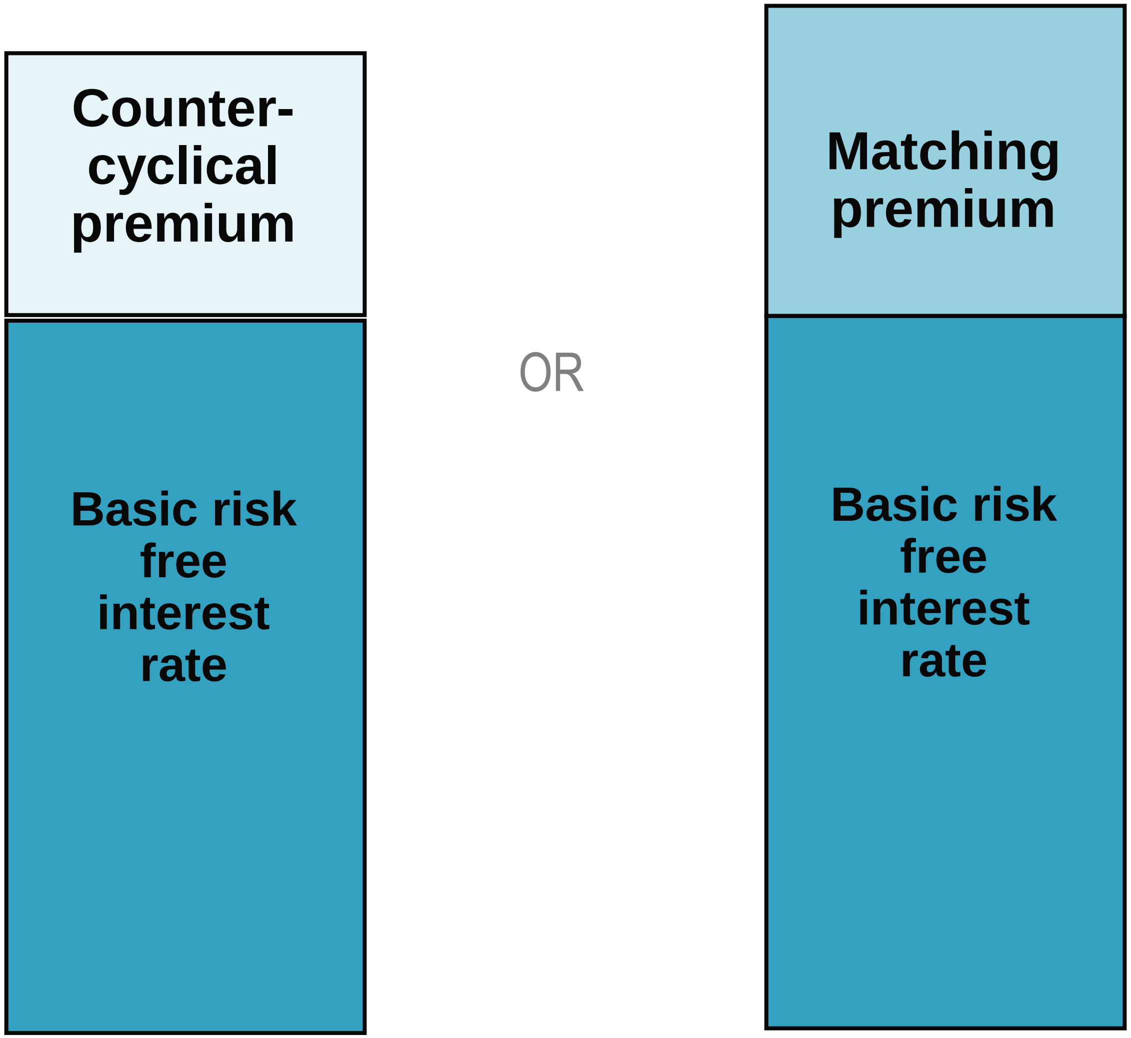


- EC set up a Working Group on long-term guarantees
  - QIS5 showed methodology for long-term guarantees needed refining
  - Reduce artificial balance sheet volatility
  - Representatives from EC, EIOPA, industry, actuaries
  - Concluded that illiquidity premium did not fully address the issues

- QIS5 illiquidity premium
  - 3 ‘buckets’ – 100%, 75%, 50%
  - 0.53% p.a. reducing over 20 years
  - 65% fall in IP under SCR shock (negatively correlated with spread risk)

# Relevant risk-free rate





# Basic risk free interest rate



- EIOPA will derive and publish term structure
  - For each relevant currency
  - Will also publish methodology used to derive term structures
- Basis of derivation
  - Interest rate swaps adjusted for credit risk and basis risk
  - If appropriate interest rate swaps not available for a currency then government bond rates adjusted for credit risk
- Extrapolation
  - Based on all relevant observed market data
  - Assumes convergence of forward rates to ultimate forward rate
  - Initial starting point for extrapolation is from the longest liquid point
  - Convergence to ultimate forward rate 40 years after starting point

# Counter-Cyclical Premium (CCP) (1)



- Applies in stressed market conditions (EIOPA decides)
  - Material part of spread can demonstrably be attributed to illiquidity or a credit spread that exceeds the credit risk of the issuer
  - The illiquidity spread is likely to result in companies selling those assets unless a CCP is taken into account
  - There is a fall in financial markets which is unforeseen, sharp and steep
- Aim is to reduce pro-cyclical behaviour
- Based on a ‘representative portfolio’ of assets (for each currency)
- Does not apply where the matching premium applies

# Counter-Cyclical Premium (2)



- Can be increased/decreased each quarter
  - Cannot decrease in first year

- Where a material part of a company's TPs use the CCP then additional information should be provided to the supervisor:
  - Description of the impact of reducing the CCP to zero
  - Where a reduction in the CCP to zero would result in non-compliance with the SCR, plans to re-establish compliance

- 100% SCR charge - but is diversified

# Comments



- Areas of debate:
  - Should asset values be adjusted instead of liabilities?

- Industry concerns:
  - Subjective
    - Set/changed by EIOPA
    - Lack of clarity over calculation and timing
    - Based on a 'representative portfolio'

⇒ Challenges for pricing, capital management …

# Matching Premium (MP) (1)



- MP included in discount rates for certain contracts (annuities)

- Rationale:
  - Annuities are backed by bonds that match liability cash flows and are held to maturity so not exposed to full spread risk
  - Reduces capital volatility arising from spread volatility

- Company specific – based on assets held

- Once applied you cannot revert!

# Matching Premium (2)



- Permanent feature for business that qualifies:
  - Company has assigned a matching portfolio of assets to back liabilities...maintain over lifetime of the obligations...
  - The assets and liabilities are ring-fenced...without any possibility of transfer
  - Future cashflows are materially matched in the same currency
  - No future premiums on the contracts
  - Only underwriting risks are longevity, expense, revision (no options*)
  - Asset cashflows are fixed (can use inflation linked assets for inflation linked liabilities)
  - Asset cashflows cannot be changed by issuer or 3rd parties
  - Assets should have a minimum credit quality (BBB)
  - Company informs supervisor the MP applies and that the requirements are met

# Matching Premium (3)



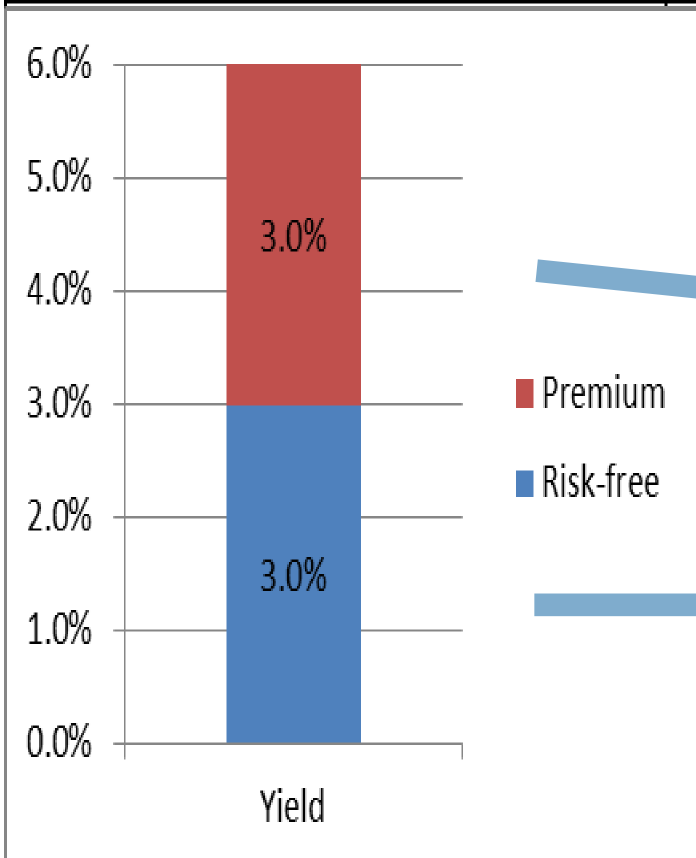
- Calculation of the MP - the difference between:
  - (a) The single discount rate that equates the value of the liability cashflows with the value of the assigned portfolio of assets*, and
  - (b) The single discount rate that equates the value of the liability cashflows with the value of the best estimate (using the basic risk-free rates)

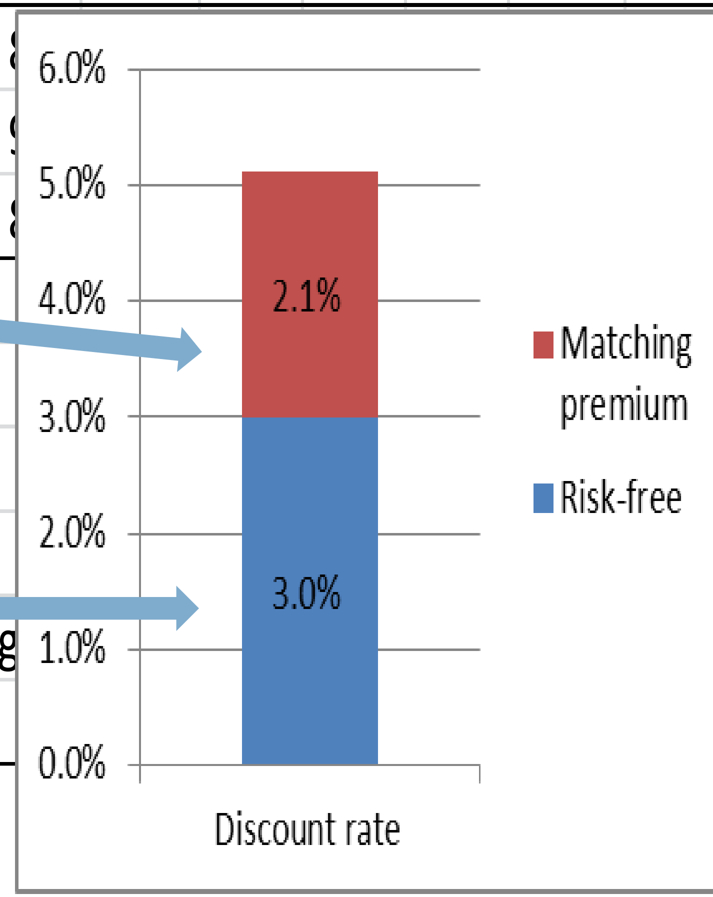
*For (a) asset cashflows should be de-risked for expected defaults

# Matching Premium - example



| Time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 100 | 98 | 94 | | | | | | | |
| | 104 | 102 | 98 | | | | | | | |
| | 100 | 98 | 94 | | | | | | | |
| | 595 | | | | | | | | | |
| | 652 | | | Sing | | | | | | |
| | 597 | | | | | | | | | |



# Not so fast…



- De-risking the assets is complex!  Expected defaults are based on a:
  - PD that corresponds to the ‘fundamental spread’, and
  - LGD of 70%

- Fundamental spread:
  - (a) Spread corresponding to probability of default, plus
    - PD based on long-term default statistics
    - Assume LGD = 70%
  - (b) Spread corresponding to expected loss from downgrade
    - Assume asset is replaced after downgrade
    - Use credit step transition rates
  - Fundamental spread floored at 75% of the long-term average spread (or 100% if information is not reliable)

# Comments



- Industry concerns:
  - Scope of application is ambiguous or inappropriately defined
    - Should contracts with surrender options be allowed?
    - Should MP be extended to other products?
  - Calculation is excessively complex
    - Give rise to inconsistencies of valuation between companies
    - Potential for manipulation through choice of assets
    - Pushing for a simpler adjustment based on a representative portfolio

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# Other Pillar 1 changes (1)



- Technical provisions
  - Reduced segmentation*
  - Risk margin
    - simplified calculation
    - re-inclusion of material residual market risk (excl. interest rate)

- Own funds
  - Grandfathering of hybrid capital under transitionals
  - Treatment of EPIFP*

- Reduced overreliance on external credit ratings
  - Own assessment of securitisations
  - Use of solvency ratio for spread, concentration, and counterparty risk calcs.

# Other Pillar 1 changes (2)



- SCR
  - Market risk
    - Interest rate risk – reduced shocks at longer durations
    - Concentration risk – revised factors
    - Symmetric adjustment to the equity risk sub-module (dampener) – more stable
    - Spread risk – reduced stresses for longer maturities
    - Sovereign debt: 0% for exposure to EU sovereign debt, including credit derivatives on EU sovereign debt
  - Life risk
    - Mass lapse – increased shock from 30% to 40%; applies to 'discontinuance' (surrender, PUP,…)
  - Op risk – slight change to factors

# Other Pillar 1 changes (3)



- SCR
  - Counterparty default – increased threshold for applying 3/5 standard deviations
  - Health risk
    - Lapse risk aligned to Life treatment
    - Change to catastrophe
  - Revised simplifications

# Segmentation



- QIS 5 requirements:
  - Segmentation into 17 life categories including:
    - With-profit, index/unit linked, other, reinsurance accepted
      - Further subdivided by main driver is death, disability, survival, savings
  - Products should be unbundled
- Latest Level 2 requirements:
  - Segmentation into 8 life categories including:
    - Health, With-profit, index/unit linked, other

# Expected Profits in Future Premiums (EPIFP)



- EPIFP is included in the reconciliation reserve which is a Tier 1 own fund item
- Calculation: difference in TPs (excluding RM) assuming that expected premiums are not received.
  - The non-receipt of premiums shall be for any reason, regardless of the legal/contractual rights of the policyholder to discontinue the policy, other than because the insured event has occurred.
- Liquidity risk management policy should include:
  - A plan to deal with changes in EPIFP
  - A qualitative assessment of the calculation of EPIFP
- Amount of EPIFP is publicly disclosed in the SFCR

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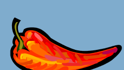
| L3:<br>- Actuarial Guidelines  | L3:<br>- Actuarial Function | L3:<br>- QRTs and guidelines<br>- QRTs for Financial Stability purposes |

# Actuarial Guidelines – 6 areas



1. General Principles (G1)

2. Data (G2 to G17)

3. Segmentation & Unbundling (G18 to G20)
more to follow

4. Assumptions (G21 to G50)

5. Methodologies to calculate TPs
(G51 to G95)

6. Validation of TPs (G96 to G104)

# Feedback (1)



General

- Helpful but…too detailed, prescriptive and theoretical – should be more principles based.
  - Expert judgment is required

- Additional disclosure of rationale for method and assumptions, exercise of judgment

- Additional guidance on proportionality and materiality and disclose how these have been applied

# Feedback (2)



Expenses

- More detail needed on expenses to be included
  - Treatment of development expenses (one-off or recurring)
- Guidance on expenses for closed or new companies
- Use own expenses rather than market

Options and guarantees

- Implies dynamic hedging can be credited
- Implied or historic volatilities?

PRE

- ‘Constructive obligations’ (PRE) should be included in addition to contractual obligations

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# Actuarial Function – 7 areas



1. Tasks to be performed
2. Coordination of the calculation of technical provisions
3. Opinion on the underwriting policy and reinsurance arrangements
4. Contributing to the effective implementation of the risk-management system
5. Internal models
6. Annual internal report to the board
7. Fitness and probity

# Feedback



- Overall
  - Clarify how actuarial functions interacts with other functions and fits into the governance structure

- Confusion over co-ordination vs calculation vs giving an opinion on TPs
  - Focus should be on ‘4 eyes’ principle rather than conflicts of interest
  - Segregation of duties – could lead to significant increase in costs
  - Guidelines should be principles based and leave organisation to the company
  - Actuarial Function can comment on underwriting and reinsurance policies it has helped develop

- Actuarial report
  - AF should report on recommendations and remedial actions (board is responsible foe managing them)

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# Pillar 3 – Reporting – Level 2 (1)



- Phasing in of reporting deadlines
  - SFCR
    - y.e. 2014 – 20 weeks ⇒ y.e. 2017 on – 14 weeks
  - RSR
    - y.e. 2014 – 20 weeks ⇒ every 3 years – 14 weeks
    - AQRTs: y.e. 2014 – 20 weeks ⇒ y.e. 2017 on – 14 weeks
    - QQRTs: 2014 – 8 weeks ⇒ 2017 on – 5 weeks

# Pillar 3 – Reporting – Level 2 - (2)



- Transitional information requirements – first year:
  - 2014 opening balance sheet
  - Explain main differences between opening balance sheet and Solvency I
  - Opening SCR and MCR
  - Deadline: 14 weeks

  - i.e. a company with a year-end of 31/12/2013 needs to provide this information by 8 April 2014

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# Group and Solo QRTs



| Category of Template | Number of Templates | Annual | Quarterly | Public (Annual) |
|---|---|---|---|---|
| | | | | |
| **FS specific** | | | | |
| | | | | |
| **Solo** | | | | |
| Balance Sheet (BS) | 3 | X | X | X |
| Activity by Country (Country) | 1 | X | | |
| Premiums, claims & expenses (Cover) | 2 | X | X | X |
| Own Funds (OF) | 4 | X | X | X |
| Variation analysis | 4 | X | | |
| Solvency Capital Requirement (SCR) | 10 | X | | X |
| Minimum Capital Requirement (MCR) | 2 | X | X | X |
| Assets | 9 | X | X | |
| Technical Provisions (TP) | 15 | X | X | X |
| Reinsurance (Re) | 4 | X | X | |
| | **54** | | | |
| **Additional Group** | | | | |
| Group (G) | 5 | X | | X |
| Intra Group Transactions (IGT) | 4 | X | | |
| Risk Concentration (RC) | 1 | X | | X |
| | **10** | | | |
| | | | | |
| Note: not all templates within a section are required quarterly/publicly | | | | |

# Some points of note



- Level of detail e.g.
  - Technical provisions – split by segment, information on cash inflows/outflows, reinsurance recoverables, cash flow projections by year…
  - Asset listing by security – information on rating, duration, maturity date, accrued interest…
  - Also look through on investment funds
- National specificities
  - Supervisors can require additional QRTs for specificities of local market e.g. local tax, profit participation
- Some changes from those published in January!

# Reporting Guidelines



- Draft guidelines on:
  - Narrative Public Disclosure & Supervisory Reporting
  - Predefined Events, and
  - Processes for Reporting & Disclosure
    - Guidance on minimum content acceptable

- Now 55 guidelines
  - SFCR (1-27)
  - RSR (28-43)
  - PDE (44-45)
  - Processes (46-55)

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# QRTs for Financial Stability Purposes



- To facilitate an analysis of sector resilience to shocks

- Reported by large insurance groups/companies
  - Balance sheet total of €6bn (phasing in/out)
    - Expect 6 Irish life companies to be in scope
    - Up to 25 companies to provide information for their group

- Pack includes templates and LOG documents

# Required information



- Financial Stability Specific items include:
  - Premiums, claims, expenses (by LOB)
  - Own Funds (total, subordinated, eligible by tier)
  - SCR, MCR
    - Proposing a simplified quarterly SCR calculation
  - Investments (portfolio list, derivatives, investment funds, securities lending)
  - Technical provisions (BEL, risk margin, by type)
  - Reinsurance
  - **Plus, add-on information**

# FS Add-on information



- Additional information on liquidity, profitability, losses shared with policyholders, interest rate sensitivity

  - Surrender rates
    - by contracts
    - by volume (best estimate)
  - Statutory accounts information
    - P&L, Balance Sheet (assets), Capital and Reserves
  - Average profit sharing
  - Duration of liabilities

# Frequency and deadlines



- Mostly quarterly (some annually)

- Same as deadlines for solo reporting
  - A challenge for groups!

- Information to be collected by national supervisors who will forward to EIOPA

# Feedback



1. How to perform the quarterly SCR calculation?
2. Feasibility of including financial statements figures?
3. Scope (€6bn) and approach to phasing in/out?
4. Additional administrative burden?
5. Preference for quarterly reporting or ad-hoc?

- Consultation ends 20 Feb 2012

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