

## Practical Issues from the PSB

**Andrew Chamberlain**

andrew.chamberlain@  
eu.watsonwyatt.com



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## Agenda

- Capital Requirements
- Resources
- The Risk Chapters
- Chapter 7.2 – the (mostly) EU rules
- Chapter 7.3 – mathematical reserves
- Chapter 7.4 – the other peak

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## Cautions!

- I cannot in the time cover everything
- I want there to be a discussion, so that leaves less time
- My interpretations are sometimes deliberately stretching the rules to the limit
- I accept no responsibility for anything!

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### Adequacy of Capital

- PRU 1.2.13 R is almost certainly too wide, but even if amended is still sweeping

"A firm must at all times maintain overall financial resources, including capital and liquidity resources, which are **adequate**, both as to amount and quality, **to ensure** that there is **no significant risk** that its liabilities cannot be met as they fall due."

- The emphases are mine, but!!

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### Capital Requirements – a multitude of initials

- CRR = Greater of MCR and ECR
- Except if either a non-directive friendly society, or no with profits liabilities, or with profits liabilities have always been below £500m, when there is no ECR
- MCR is higher of "BCRR" or the sum of "LTICR" and "RCR"
- ECR is "LTICR" + "RCR" + "WPICR"
- Looks complicated, but it isn't – though you must be able to do this at all times

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### Capital Resources

- The "other way round"
- Strict definitions of types of capital
- The Tiers
- Deductions
- Limits
- Oddities

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### Balance Sheet focus

- Base is Companies Act balance sheet – since it includes the FFA for example
- FFA and P&L balances have different treatment
- Types of shares and other instruments have complex rules

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### Tier One

- Loss Absorbing
- Permanent
- Ranks after all other debts and liabilities on winding up
- No inescapable fixed costs (coupons, dividends)

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### Tier One

- Permanent share capital
- Similar things
- Audited reserves
- Verified net profits
- FFA
- Perpetual non-cumulative prefs
- “Others” and “Innovatives”

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## Tier Two

- Upper is perpetual and lower is fixed term
- Cumulative preference shares
- Qualifying Hybrid capital
- Subordinated debt

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## Others - subject to waivers

- Unpaid share capital and initial funds
- Implicit items

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## Limited Uses

- EU limits on cover for BCR and MCR
- Note one-third not one-sixth explicit capital under solvency I
- Restricting innovative tier one to 15% of total tier one (else ignore excess)
- Restricting upper tier two to tier one level, or ignore excess
- Restricting lower tier two to one half of tier one or ignore excess
- EU is doing similar

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### Some issues and oddities

- Interim numbers are “net” – what does this mean?
- Inadmissible TYPE assets are excluded in an insurance fund for all purposes – deduct for tier one
- Consider the impact of Chapter 3.10 Credit Risk – includes admissibility limits so further adjustments must be made

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### Subordinated Debt

- New conditions met = automatic credit
- Particularly all new FSA capital requirements must be met
- If not (all old issues?) – will waivers be granted?
- Key issue – default must not occur von breaking capital requirements unless it creates a due but not payable sum
- Conversion to ordinary shares does not seem an acceptable remedy for default – why is unclear?
- External legal opinions required

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### Credit Risk

- Contained in CP143 Chapter 3.10
- 3.10.21 excludes counterparty limits on secured debts, premium debts, reinsurance debts, policy loans, salvage, subrogation and DAC (non-life)
- 3.10.23 allows reinsurance exposures guaranteed to be regarded as exposure to the guarantor for those rules where reinsurance is excluded!!!!
- Zone A governments, UCITS and property linked assets still excluded from admissibility limits

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## Market Risk

- The new resilience regime
- “Real estate” (YUK!)
- Complex process description seems just what every Appointed Actuary always did (or should have!)
- Method requires specific attention to overseas territories
- Additive result

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## UK

- Familiar equity test – seems unconnected to the fixed interest test
- A real estate test – unconnected to any others and rather complex, including three year averaging
- Parallel shift of gilt curve by 20% of long term gilt yield
- Result is two scenarios, and use the more onerous

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## Issues

- Double counting where future investment yield still applies
- No correlation reliefs
- No interaction giving worse equity falls if FI yields rise
- 90 day relief (which is pretty useless) remains

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## Interest rates

- Valuation rates to be “with derivatives” – issues sometimes where protective options are held, which might distort yields (how does an equity plus a put option get considered “together”, given the latter is not an equity? Global derivatives based on indices?)
- “Forecast” changes in dividends “publicly announced” (by whom?)
- “Forecast” changes in earnings yield
- Twice the dividend yield cap goes

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## Interest rates

- Increased emphasis on risk margins, especially for equities (credit risk?) and hold to redemption versus tradable (liquidity risk, problems for those reporting on US GAAP or under IAS?)
- Still use arithmetic means! (interaction with derivatives???)
- Revised future investment rules for realistic basis firms (forward gilts curve)

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## Matching

- Close matching for property linked is much more woolly, and refers to “by the assets” – in theory does this prevent reassurance?
- For index linked the “permitted link” test goes (which removes some of the justification for certain derivative guidance, but that is likely to be revised anyway – open season for “daft” index linked policies?)
- Index linked gilts seem no longer to meet the tests for RPI!

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### Resources and provisions

- Still have mathematical reserves where long term insurance CONTRACT liabilities apply, under generally accepted actuarial best practice – this could make a GN which is “best practice” into mandatory for a firm
- Composites must “make good” the LTBF
- With profits funds must be sufficient to meet mathematical reserves or realistic equivalent whichever is higher (This is significant and draconian)

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### Matching

- ENSURE cash inflows from assets will meet expected outflows as they become due
  - No equities?
- For this purpose take options in contracts into account
  - Worse and worse?
  - No matter how extreme? (ENSURE)
- Guidance is weaker “reasonably expects”, but this is for INFLOWS. Reference is made to “current expectations” however.

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### Mathematical Reserves

- Lots of wording changes – how much is ACTUALLY changed?
- Margins for adverse deviations “sufficiently prudent to ensure ... no significant risk that liabilities ... will not be met as they fall due”
- Basis records must be kept
- Final bonuses are excluded from the Chapter – reversing some of the 2000 amendment regulations? Or does it?

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### Future Premiums

- For accumulating with profits the premium **must** be ignored – does this include for sterling reserves/expenses?
- Some potentially awkward wording changes in altered policies

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### Expenses

- A much longer set of rules
- Premium margins can only meet expenses which “would **only** arise if the future premiums were received”

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### Options

- GAOs in particular are liberalised – somewhat imprudently it might be felt
- Does this change in stress tests?

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## Persistency

- Allowance for regulatory firms on with profits business only

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## Reassurance

- Designed to cover financing
- Seems to allow additional financing concessions for direct linkage to emerging surplus
- Despite one possible interpretation of that, it does **not** appear to exclude the traditional approach of ensuring the payments are met from margins arising
- Note 7.3.83 insists on it being linked to contingencies within the valuation! No other dependencies
- A fairness override applies, as it probably always did, on with profits business

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## "Peak Two"

### • A – B

- A is old fashioned surplus, but on a modified basis and adjusting to omit non profit business assets (chosen to be of an "appropriate nature") and liabilities
- B is "realistic" surplus

This is a "two actuaries" job – plus a reviewing actuary, and probably a peer reviewer too!

Also need a Risk Capital Margin – super-resilience test

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### Issues

- Non profit business – basis and solvency
- Non profit resilience – meaningful?
- Embedded value – what are “industry standards”?

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### Risk Capital Margin

- Scenario tested
- Unfair rules for corporate bonds – buy the “worst of breed”
- Many oddities, but let’s accept it is to be refined

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### WPICC overall

- Work in progress?
- Fit to publish?
- Misleading?
- Mis-selling risks?

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