The Actuarial Profession
making financial sense of the future

New Guidance Notes for the Integrated Prudential Sourcebook

Mike Kipling, Chairman, Life Supervision Committee

Changes on commencement of PRU

- Appointed Actuary role abolished
- Firms have responsibility for liability valuation
- Liability valuation to be audited
  - with actuarial input
- Twin peak approach for large with-profits funds
- ICAs for all
- With-profits actuary role created
- Enhanced ‘systems and control’ requirements
- Peer review - WPA [and AFH?]

Earlier Changes

- Some firms’ realistic balance sheets in FSA returns
- PPFM published
- Independent input into with-profits governance
- Firms to report on exercise of discretion for balance of current financial year
  - in preparing this report, firm should take advice from an actuary (COB 6.11.14G)
  - starting from ???

Existing guidance

- Replaced
  - GN1, GN2 and GN8
- Updated
  - GN7 and GN37

New guidance

- Generic guidance to life actuaries with formal roles under PRU/SUP
    - GNL1
- Guidance on fulfilling specific roles
    - GNL2 (Actuarial Function Head)
    - GNL3 (With-profits Actuary)
    - GNL4 (Reviewing Actuary and WPA Peer Reviewer)
    - GNL5 (Appropriate Actuary)
    - GNL6 (Lloyd's Life Actuary)

New Guidance

- Guidance on technical issues
  - TS1 (Mathematical Reserves and Resilience Capital Requirement)
  - TS2 (With-profits Insurance Capital Component)
  - TS3 (Individual Capital Assessment)
  - TS4 (Stochastic Modelling)
    - to be discussed in break-out sessions
- 'TSs' are not addressed specifically to actuaries
  - will count as 'generally accepted actuarial best practice' for the purposes of PRU, so apply to firms.
  - will apply to all actuaries formally involved

GN L1 - Generic

- Applies to all with ‘FSA’ roles except Lloyd’s actuaries
- Section 1
  - Possession of relevant knowledge and experience and of an appropriate practicing certificate.
  - Audience to be aware of when advice given ‘in role’.
- Section 2
  - Reminds of regulatory obligations, including ‘whistleblowing’.
  - Requires disclosure of practices which differ from guidance.
- Section 3 - Conflicts of Interest
  - Same individual can be AFH and WPA
    - If so, FSA prevents from being director

GN L1 - Generic

- Section 3 cont.- Conflicts of Interest
  - WPA can report to AFH
  - If either WPA = AFH or WPA < AFH, WPA must seek peer reviewer 'sign-off' in advance on any advice likely to be perceived as against with-profits policyholder interests.
  - Reviewing Actuary and WPA peer reviewer can be the same individual
    - Must be independent of insurer
    - May not be AFH or WPA
- Section 4 - AFH and WPA
  - If same person, board to be aware which hat is being worn
  - If different, must maintain regular, direct contact.

GN L1 - Generic

- Section 4 cont. - AFH and WPA
  - AFH responsible for verifying that recommended valuation basis takes account of PPFM
  - WPA to be aware of capital implications of advice on exercise of discretion
  - WPA to be happy with asset share calculations if carried out by AFH
    - including compliance with PPFM
- Section 5 & 6 - Reviewers
  - Inappropriate for AFH or WPA to place reliance on any work carried out by reviewing actuary or WPA peer reviewer respectively.
- Further suggestions welcome.

GN L2 - Actuarial Function Holder

- Section 1.
  - GN written as if only one AFH for firm
    - if more than one, clear apportionment of responsibilities must be obtained and each should seek to find a common view if possible.
  - Assumes no requirement for peer review in addition to audit
    - but still under consideration
  - Refers to TS1 - 4
- Section 2 - Regulatory requirements
  - PS167 reinstated SUP requirements for AFH to advise on risk and to monitor ability to meet 'liabilities to policyholders'
    - as 'liabilities to policyholders' includes fair discretionary benefits there is overlap with WPA
    - possibility that FSA may simplify, so old GN1 guidance left unchanged for now (Sections 3 & 4).

GN L2 - Actuarial Function Holder

- Section 2 cont.- Regulatory requirements
  - AFH to obtain written instructions as to which extra-statutory responsibilities have been apportioned to him/her, especially of those listed in SUP 4.3.15G.
  - AFH not to accept appointment unless has right of access to board.
- Section 5 - Methods and Assumptions
  - AFH must provide enough information about material factors to enable the board to judge
    - the appropriateness of the advice
    - the implications of accepting it
      - including the implications for the policyholders of the firm.

GN L2 - Actuarial Function Holder

- Section 5 cont.- Methods and Assumptions
  - If firm's required basis falls outside a reasonable range of uncertainty around AFH recommendations
    - AFH must inform the firm of this opinion.
  - If the firm does not alter its instructions
    - the investigations or calculations must then be carried out on the assumptions provided by the firm.
  - AFH must consider whether this would be a matter to communicate to FSA under GN37
- Sections 6 & 7 - Investigation & Reporting
  - Still to be developed

GN L3 - With-profits Actuary

- Section 1
  - GN written as if only one WPA for firm
    - if more than one, clear apportionment of responsibilities must be obtained
    - professional requirement not to normally accept a split role unless in respect of a clearly defined sub-fund
  - Requirement for peer review in respect of formal advice given to firm and annual reports to firm and to policyholders
- Section 2 - Regulatory requirements
  - mainly a summary

GN L3 - With-profits Actuary

- Section 3 - Relationship with Firm
  - Mainly summarises regulatory position
  - WPA should ensure access to adequate data
  - Should ensure that appointment allows comment on with-profits sales literature and regular communications prior to production.
- Section 4 - Reporting
  - Based on GN1 - but new guidance on report size/content
  - WPA should normally exercise right to present to board
  - Possible communication requirement under GN37 if inadequate allowance for future bonus in
    - mathematical reserves for ‘regulatory basis’ firm
    - realistic balance sheet for ‘realistic basis’ firms.

GN L4 - Reviewing Actuary and WPA Peer Reviewer

- Section 1
  - The practicing certificate held must be relevant to the type of business of the firm.
- Section 2 - Role of Auditor
  - Explains that auditor must take advice from an actuary
    - the ‘reviewing actuary’
  - May rely to an extent on his or her advice (SAS 520)
    - but ultimately must make up own mind on value placed on liabilities and on capital requirements.
  - Refers to auditing guidelines PN20
    - to be updated to include PRU liability audit?
  - Reviewing actuary does not <u>formally</u> advise on Companies Act accounts

GN L4 - Reviewing Actuary and WPA Peer Reviewer

- Sections 3 & 4 - Roles
  - Summarises FSA Reviewing Actuary certification requirements
  - Requires WPA peer reviewer to report to WPA on whether the duties reviewed have been performed in accordance with FSA rules and actuarial professional guidance.
  - What additional guidance, if any, is needed?

TS1 - Mathematical Reserves and Resilience Capital Component

- Residual guidance from GN8
  - much already in PRU 7.3
  - plus some new guidance
  - order follows PRU 7.3
- Section 1
  - introduction
  - additional reserves plus disclosure if data unreliable
- Section 2
  - now explicit rule not requiring MR for final bonus
    - but provision in realistic b/s and/or ICA
  - CP195 text implies no MR for future annual bonus
    - but draft rules still require
    - draft TS1 follows rules - but may change.

TS1 - Mathematical Reserves and Resilience Capital Component

- Section 3 - Margins for adverse deviations.
  - PRU 7.3 requires margins which are “ sufficiently prudent to ensure that there is no significant risk that liabilities will not be met as they fall due”.
    - Surprisingly onerous - and similar to ICA
  - For main market risks, OK to assume that PRU 4.2 plus the resilience capital requirement satisfy this
    - but not for, say, volatility risk on embedded options.
  - PRU 7.3.18 -19 suggest that the firm’s own or a market risk premium may be an appropriate margin
    - or an external proxy (i.e. a published mortality table)
    - important to square these with above definition, if not changed.
  - Need to consider stochastic modelling of mortality <u>now</u>

TS1 - Mathematical Reserves and Resilience Capital Component

- Section 4 - Avoidance of future valuation strain
  - clarifies that reasonable, experience-based, paying-up assumptions may be used
    - i.e. no need to assume all made paid-up at worst time
    - consistency of expense inflation and investment return assumptions (but must be overall prudent)
- Section 5 - Interest Rates
  - need to ensure that overall tax liability is allowed for in netting down
    - if asset allocations differ from those for tax purposes
  - allocation of assets to liability classes need not, for realistic basis firms, be the same as under PRU 7.4. 23

TS1 - Mathematical Reserves and Resilience Capital Component

- Section 5 cont. - Interest Rates
  - guidance given on earnings to be used in equity yield calculations
    - remove one-off profits
    - adjust for published half-year results and stock-exchange announcements
    - no need to adjust for analyst forecasts, whether in-house or not.
  - PRU 4.2.36R requires adjustment to yields for credit risk
    - know how to do for bonds
    - what guidance is needed for equities and property?
    - To what extent does market price this risk anyway?
  - Is guidance needed on how to apply forward yield curve?
    - As realistic basis firms are <u>required</u> to do
    - E.g. acceptable approximations?

TS1 - Mathematical Reserves and Resilience Capital Component

- Section 6 - Future premiums
  - net premium method may still be used by realistic basis offices
    - provided premium valued does not exceed gross
    - and adequate allowance for expenses (and future bonus?)
- Section 7 - Expenses
  - generally little changed from GN8
  - is any more guidance required?
- Section 8 - Mortality & Morbidity
  - requirement to assume that current rates of annuitant longevity improvement continue
    - unless good reason
    - may apply by birth-year cohort
    - margin must assume increase in improvement rate

TS1 - Mathematical Reserves and Resilience Capital Component

- Section 8 cont.- Mortality & Morbidity
  - may net off margin against decreasing trend in assurance mortality
  - but allow for critical illness claim trends
    - e.g. angioplasty
    - especially for guaranteed rate products
- Section 9 - Options
  - GAOs
    - rules require 95% take-up after 20 years
    - GN requires uniform progression from a prudent current rate to that
  - TS4 on stochastic modelling may be relevant
  - May only assume lower than current MVR on mass surrender if PPFM explicitly allow this.

TS1 - Mathematical Reserves and Resilience Capital Component

- Section 9 cont.- Options
  - PRU 7.3.70(1) requires adequate reserves for each policy
    - PRU 7.3.70(4) lifts this to apply only at the level of ‘groups of similar contracts’
    - What are these groups? Should FSA or profession define?
    - Similar issue with non-option reserves in PRU 7.3.28
- Section 10 - Persistency
  - Needed for realistic basis offices
    - must assess whether increase or reduction is prudent
    - may be different directions for different classes or on particular events
    - rules require increasing prudence further into the future
- Section 11 - Reinsurance
  - What guidance is needed?

TS1 - Mathematical Reserves and Resilience Capital Component

- Section 12 - Resilience Capital Component
  - PRU 4.2.15 (1) to be interpreted as not allowing an increase in running yield after equity/property fall
    - i.e. consistent with realistic balance sheet requirements
    - potentially quite harsh, given property covenants and earnings yield restrictions
    - possibility of change in PS195?
  - Revised hypothecation of assets can take place in stress scenario
    - but only using assets originally hypothecated to liabilities or to the 4.2.9 (3) ‘shortfall’
  - Assets allocated to 4.2.9 (3) shortfall may come from outside the long-term fund.
  - Still allowed to relax any ‘hidden’ margins and any asset PAD

TS2 - With-Profits Insurance Capital Component

- Covers all elements of the realistic balance sheet
- Sections 1 - 3
  - General introduction
  - Need to develop guidance on fair allocation of assets
  - Note need to keep each asset share parameter until last policy using it has expired
- Section 4 - Value of Assets
  - guidance so far only on value of non-profit business
    - must not take credit beyond a ‘market consistent’ value
    - may be negative if statutory basis asset allocation ‘artificial’
- Section 5.2 - With-profits benefit reserve
  - Main ‘message’ is consistency with practice
    - PPFMs and terminal bonus calculations

TS2 - With-Profits Insurance Capital Component

- Section 5.2 cont. - With-profits benefit reserve
  - 5.2.1.7 suggests that proprietary firms may take credit in certain circumstances for future shareholder transfers which it has agreed not to dividend
    - FSA have yet to accept this - we await PS195 and/or FSA response to due process
  - Prospective approach
    - what guidance needed?
    - what discount rate to use?
- Section 5.3 - Future Policy-related liabilities
  - 5.3.1 highlights lack of guidance in PRU as drafted on order of calculating guarantee costs vs asset share enhancements/reductions
    - unlike current informal reporting process
    - PS195 may elucidate

TS2 - With-Profits Insurance Capital Component

- Section 5.3cont. - Future Policy-related liabilities
  - Planned distribution of estate must be recognised as liability
    - but not distribution of RCM
  - How to value future charges for guarantees?
    - What discount rate?
    - Maybe stochastic/dynamic approach better?
  - Market-consistent approach preferable for all items
  - Smoothing
    - drafted pre-CP207….
    - …..but must reflect real-life practices and PPFMs
    - Will an annual stochastic model pick up full cost?
  - Misselling Costs
    - necessary to make best estimate of future compensation, administration and FOS costs
      - for all time, unless office is applying valid 'limitation'
      - only for 'mass' exercises (endowments, pensions, etc)

TS2 - With-Profits Insurance Capital Component

- Section 6 - RCM
  - 6.1.2 makes clear that the realistic liabilities plus RCM do not necessarily constitute adequate reserves and capital
    - neither does the mathematical reserves (+ RCC +RMM)
    - but the ICA must.
  - 6.2.1 guides on determining falls for overseas equities equivalent to the 25% prescribed for the UK.
  - 6.2.3 allows, for regular realistic solvency monitoring, the assumption that the gilt yield fall/rise most onerous at the last half-year applies.
  - Credit risk - feedback awaited from FSA on treatment of approved securities and derivatives/bank deposits
  - Persistency - GN clarifies that ‘retirement’ means at a guarantee date only
    - otherwise it is an early termination

TS2 - With-Profits Insurance Capital Component

- Section 6 cont.- RCM
  - 6.5.2 requires any ‘management actions’ to be realistically achievable in the circumstances in which they would apply
    - allow for time to transact
    - allow for size relative to market capacity
    - allow for likely similar intentions of competitors
    - must be consistent with PPFMs
    - if changes assumed to be made to practices, must allow time for governance processes to take place
  - Cannot assume ‘mass’ surrender MVRs in scenarios where persistency is assumed to increase
    - or at least stays unchanged - depends on eventual persistency test
  - Must assume increased GAR take-up rates in lower interest rate scenario
    - may not offset possible reduction due to increased concern over insurer solvency in stress scenario.

TS2 - With-Profits Insurance Capital Component

- Section 7 - Options
  - Stochastic model ‘best practice’
  - Alternative using market prices which can be shown to be equivalent may be used
  - Ideally allow persistency/mortality to vary dynamically (and even stochastically)
    - deterministic alternative to allow for correlation (or absence thereof)
  - TS4 gives guidance
  - What guidance needed on deterministic alternatives?
- Section 8 - Reporting
  - ‘Claims’ defined for purposes of required claims ratio
  - Allocation of investment return where a ‘differential’ approach used
  - Disclosure re stochastic model
    - needs review for TS4 consistency
  - Analysis of working capital
    - comments needed on practicality (c.f. 31.12.03 FSA submissions)

TS3 - Individual Capital Assessment

- Will probably only have 'recommended practice' status
  - ICAs are a new development
    - although drawing on FCRs
  - No formal requirement for an actuary to be involved
    - and one may not be in some parts (e.g. operational risk).
- Section 1
  - An open firm should carry out ICA as if it was to close a.s.a.p.
    - and to run off the business in accordance with its PPFM
  - And also as if it was to continue under its current new business plans
  - Capital must at least cover the former…..
  - …..and if the latter requires more capital, it must be clear when and from where this is to be obtained if not already possessed.
  - Usual requirements re data quality and deviation from GN.

TS3 - Individual Capital Assessment

- Section 2 - Role of Actuaries
  - SUP 4.3.15 requires firms to take professional advice on financial and risk analysis
  - TS3 recommends that advice is sought from an actuary, especially on market and insurance risks
  - If not from the AFH, TS3 recommends that the AFH is asked to comment on the advice received.
  - Similarly, the WPA should be asked to comment on external advice received relevant to exercise of discretion
  - There is no formal peer review requirement on any actuarial involvement in ICAs.
- Section 3 - Identification of Risk
  - FSA's risk categories are suggested as a starting point
  - No specific guidance given in TS3 on operational risk
    - but statistical approach recommended if usable data available
    - and likely to require all costs during run-off to be covered.

TS3 - Individual Capital Assessment

- Section 4 - Stress and Scenario Testing
  - Thoroughness and depth of tests depends on capital strength
    - as demonstrated by a previous ICA
    - or if a high level ICA shows a newly weak position
  - Normal to use stochastic modelling in ICA if used in realistic balance sheet
    - using consistent assumptions, particularly with regard to management and policyholder actions
  - If deterministic scenarios are used, broad aim should be to be as extreme as a scenario that an acceptable stochastic model under TS4 would generate to the selected quantile.
  - Need to combine different risks scientifically
    - allowing for correlation
    - and possibly for increased correlation in more extreme circumstances
  - FSA have implied that ECR is intended to be BBB capital
    - but only covers some risks, doesn't allow for less than 100% correlation and may over or understate those risks it includes

TS3 - Individual Capital Assessment

- Section 4 cont. - Stress and Scenario Testing
  - So no need for ICA tests to be same as RCR/RCM
    - even if BBB is target
  - But likely that more onerous tests needed if stronger rating required
  - Time horizon long enough to ensure that all material risk costs included
  - Is FSA requirement just to be able to meet liabilities when due?
    - or is it to meet ECR at all times (or at least at all year ends)?
    - or to have assets in excess of liabilities at 'all' times?
  - For firm to discuss with FSA what is possible
    - 'all' times approaches may involve 'nested' stochastic modelling
    - only possible, at least in theory, using closed-form approaches within the 'loop'
  - But directors likely to want stochastic projections of realistic solvency positions?

TS3 - Individual Capital Assessment

- Sections 5 & 6 - Market & Credit Risk
  - Still under development - input sought!
  - Stochastic credit models may require some combination of these headings in practice.
  - Outline guidance on credit risk for non-investment counterparties
- Section 7 - Insurance Risk
  - <u>Expenses</u> - Need to allow for a return to inflationary environment of 70s/80s
    - important for closed funds, especially non-linked non-profits
    - appropriately calibrated stochastic modelling may be necessary
  - Guidance on assumptions re expenses of outsourced functions and of shared functions within a group

TS3 - Individual Capital Assessment

- Section 7 cont.- Insurance Risk
  - Assurance mortality - need to consider 'large scale' events
    - e.g. epidemics, terrorist attacks
  - but only to a 'reasonably foreseeable' level
    - i.e. not a repeat of the black death - or a large meteorite impact!
  - particularly important if material group life business written
  - Annuitant mortality - adverse scenario will be an increase in the rate of improvement
  - 'large scale' event (e.g. a major medical breakthroughon ageing prevention, cancer treatment, etc)
  - Persistency - consider both general deterioration and specific causitive factors (e.g. correlation to interest rates, impact of closure to new business).
- Section 8 - Liquidity Risk
  - to be written - what would be useful?

What Next?

- Your comments welcome
  - To Maria Singleton - or any Supervision Committee member
- Revise after PS 195/202/207 and final SUP
- Due Process summer/autumn
  - Probably accelerated due to limited time
  - Open meetings in London & Edinburgh
- To apply from coming into force of PRU
- Expect some revisions as experience gained
- Longer term : Morris Review

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