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# More to do than just MA

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Barnett Waddingham LLP

4 June 2015

## Contents


- Governance requirements
- Proving SF appropriateness
- Outstanding MA issues
- VA applications
- Pension scheme SCR
- Portfolio optimisation

## Investment Governance

Solvency II Directive 2009/18/EC 17.12.2009

Delegated Act 10.10.2014

1. Must have an effective risk management system that covers
   a. Asset-liability management
   b. Investments
   c. Liquidity risk
   d. Concentration risk
2. Significant documentation of investment policies, decision procedures and risk assessments
3. Shall not solely depend on information provided by third parties
4. Do companies need a CIO?

Omnibus II Directive 22.05.2014

Report on Guidelines on system of governance 28.01.2015

**Need to ensure that you have all the necessary documentation**

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## Questions to answer and document

- What are you trying to achieve?
- What performance are you targeting?
- What are your decision-making processes?
- How are you targeting achieving out-performance?
- What are your current conviction positions?
- What are the greatest risks to the portfolio?
- What risk limits are you working to?
- How do you deal with breaches?

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## Standard Formulae Appropriateness

- Responsibility of the Board to identify areas where the firm materially deviates from SF assumptions
- PRA expecting to review all appropriateness investigations in 2015
  - Equity and credit holdings listed as 2 of 5 key areas for life insurers
- EIOPA paper describes derivation of SF SCR stresses and correlations
- Need to test underlying assumptions against actual holdings
- Qualitative (inc ORSA) and quantitative justifications
- Individual vs overall appropriateness

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## PRA letter – 1 June

- Collateral management
  - MA portfolio treated separately
    - No explicit requirement for separate MA CSAs
  - Issues if return assets are not identical those posted
    - Liquid vs. illiquid assets
  - Stock-lending provisions
    - Over-collateralisation instead of MA eligible assets
  - “Very adverse” scenario testing
- Internal ratings
  - Much less than expected

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## PRA letter – 1 June

- Reinsurance
  - Gross treatment preferred
  - Reinsurance recoverables haircut, not fundamental spreads
  - Net treatment for PRA tests
- Fundamental spreads
  - By cashflow, not asset maturity/duration
- Matching
  - No management actions or assumed reinvestment

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## PRA supervisory statement

- Main items:
  - Risk management policy
  - Liquidity plan
  - TPs & Own Funds with and without VA
- Three conditions when assessing
  1. VA is correctly applied
  2. Will not lead to pro-cyclical investing
  3. No breaches of "relevant requirement"
     - Includes "sufficiently predictable" liability cash flows
- Turnaround: 6 weeks – 6 months

Proport-
ionality

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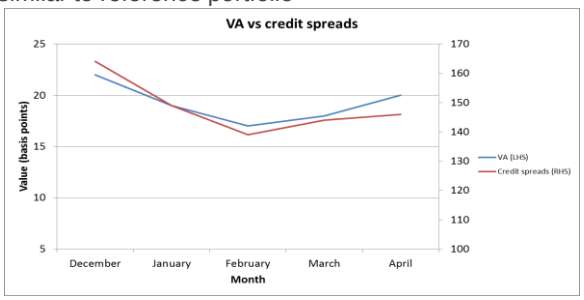
## What VA does <u>not</u> require

- A specific investment strategy
  - No requirement to be similar to reference portfolio
    - Hedging issues
    - Corporate bonds will provide some matching
  - Do need to consider matching of assets and liabilities




Source: EIOPA and iBoxx

- A specific type of business
  - No explicit restrictions
  - Liquidity of liabilities needs consideration

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## Pension scheme SCR

| DB pension schemes | Standard formula | Internal model / ORSA |
|---|---|---|
| • Including DC schemes with a DB underpin | • Market<br>  • Interest rate<br>  • Equity<br>  • Credit<br>  • Currency<br>• Counterparty | • Appropriateness<br>• Longevity<br>• Inflation<br>• Credit spread shock |

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## Pension scheme SCR

- Data
  - Look-through
  - Fund manager constraints
- Valuation basis
  - IAS19/Accounting basis
  - Discount rate = “high-quality” corporate bonds
    - Normally taken to mean AA
- Deficit payments
- Surplus issues
  - Limit on recognition

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## Portfolio Optimisation – which metric?

- Economic or Capital driven?
- Return net of CoC or Expected Return on Capital?
- Individual asset or portfolio level assessment?
- Pre or post diversification benefit?
- Include Risk Margin in capital figure?

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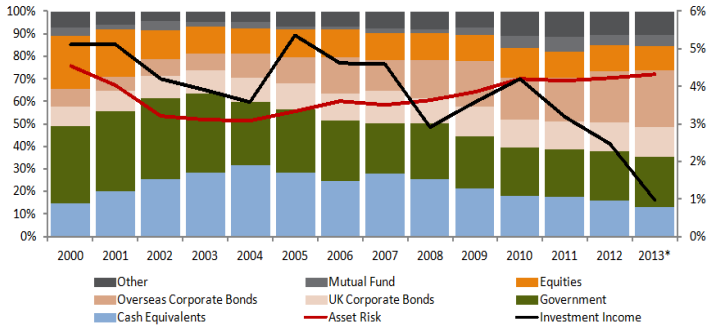
## Portfolio Optimisation Example

- Material changes in asset allocation for GI companies since 2000 – will we see a change in strategies under S2?




Source: JPMAM

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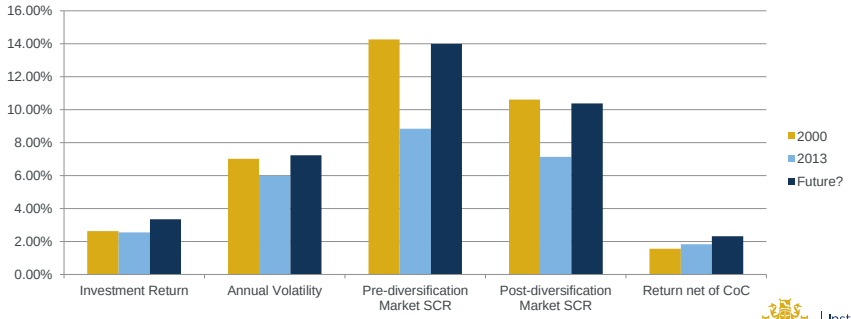
## Portfolio Optimisation

- Depends on metric!
- Tested 20% cash/gilts, 55% bonds, 25% equities against historic and current portfolio averages for a dummy company.




Sources: JPMAM Long Term Capital Market Return Assumptions, Barnett Waddingham SCR calculation model, Siimplify

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## Portfolio optimisation - VIF Management

- Under S2, the requirement to match the face value of liabilities with units disappears – only need to match the BEL (+ risk margin)
- This gives companies investment freedom in respect of the VIF
  - If continue to match with units, introduce market down risk.
  - If choose to invest in cash, introduce lapse/ market up risk.
- Optimal solution may be somewhere in between and/or involve risk mitigation transactions
- Systems, TCF, accounting will all have an impact

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## Portfolio Optimisation – VIF management

- Case study using a sample policy
  - 10 years
  - 100% UK Equity UL policy
  - 1% AMC
  - Surrender penalties in first 5y
  - 5% pa lapse rates
  - Stochastic equity and cash returns

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## Portfolio Optimisation – VIF management

| Strategy A | Strategy B | Strategy C | Strategy D |
|---|---|---|---|
| • VIF 100% Equities | • VIF 100% Cash<br>• Insert cash if FV<UF<br>• Remove cash if FV>UF | • VIF 100% Cash<br>• Insert cash if FV<BEL | • VIF 100% Cash<br>• Insert cash if FV<BEL<br>• Remove cash if FV>UF |

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## Portfolio Optimisation – VIF management

| | | Average | Standard Deviation | 5th percentile | 95th percentile | SCR |
|---|---|---|---|---|---|---|
| VIF in equities | PVFP | 1,021 | 325 | 550 | 1,600 | 276 |
| | Cash insertions | 0 | 0 | 0 | 0 | |

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| VIF in cash | PVFP | 834 | 34 | 784 | 893 | 44 |
| UF=VF | Cash insertions | 181 | 308 | (262) | 733 | |

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| VIF in cash | PVFP | 814 | 36 | 757 | 872 | 44 |
| VF>BEL | Cash insertions | 162 | 200 | 0 | 566 | |

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| VIF in cash | PVFP | 814 | 36 | 757 | 872 | 44 |
| VF>BEL | Cash insertions | 162 | 200 | 0 | 566 | |
| VIF in cash | PVFP | 807 | 30 | 757 | 852 | 44 |
| UF>VF> BEL | Cash insertions | 104 | 260 | (279) | 566 | |

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## Conclusions

- Matching Adjustment has taken up a huge amount of time for those going through the process (and will continue to do so)
- However, there are still a lot of work to do in other areas to ensure compliance at 1.1.16
- Optimisation opportunities – will companies have time to investigate these this year?

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**Questions**

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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