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Matching Adjustment and Volatility Adjustment

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Agenda

1. Products with long-term guarantees under Solvency II
   - Issues for these types of products
   - How regulation looks to address these issues
2. Practical implementation of the Matching Adjustment and Volatility Adjustment

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Products with long-term guarantees and Solvency II

Products with long-term guarantees

- Products with long-term guarantees can look particular unattractive under Solvency II where long-dated, relatively stable liabilities are matched by assets that need to be valued at market rates on a regular basis
- Covers a range of long-term products with interest rate guarantees
- Characterised by highly predictable cashflows and no, or positive, strain on surrender
  - E.g. annuities
- Often backed by high quality fixed interest asset portfolios held to maturity
  - As holding to maturity, asset cashflows are only affected by default rates and not spread volatility
  - Changes in liability cashflows generally would not force insurers to sell assets early
- Products with long-term guarantees provide essential social benefits, such as retirement provision, in many countries

Products with long-term guarantees

- Unless the right steps were taken, Solvency II risked creating artificial volatility (in Own Funds) & pro-cyclicality
- Not addressing the issues of artificial volatility and pro-cyclicality risks insurers shifting from longer-term to shorter-term assets, leading unnecessarily to a range of unintended adverse macroeconomic impacts:
  - Limiting the insurance industry's traditional role to invest and assist growth in the European economy
  - Reducing the insurance industry's traditional role as a stabiliser in financial markets, and thereby reducing systemic risk and market volatility
- Consumers may also have suffered where companies stopped selling long-term guaranteed products and/or increased policyholder charges due to unnecessarily high capital requirements for these products

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Long-Term Guarantees Measures

- **Matching Adjustment (MA)** – applied to the discount rate used to value annuity-style liabilities backed by "hold-to-maturity" assets to mitigate the impact of spread movements on the balance sheet.
  - Based on the assets held by the firm
  - Calculated as the spread over risk-free rates on the matching assets less an allowance for defaults and costs of downgrades
  - Introduces a number of restrictions on liabilities and backing assets
- **Volatility Adjustment (VA)** – applied to the discount rate used to value all other business.
  - Based on assets on a representative portfolio calibrated at currency and country level
  - Calibrated as 65% of the risk-adjusted spread of assets in representative portfolio
  - No restrictions on liabilities on assets but value is dependent on EIOPA calibration

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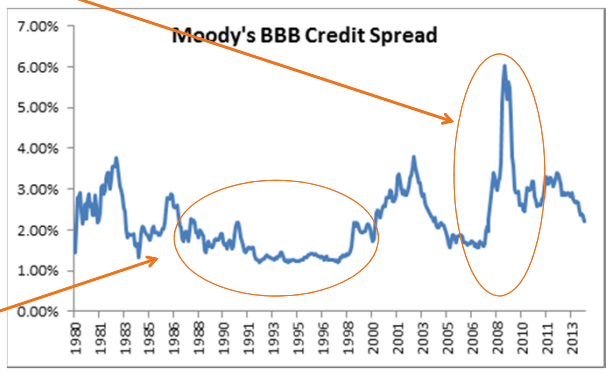
Long-Term Guarantees Measures

- Large movements in credit spreads occur every so often – the VA is intended to allow firms to weather these temporary spikes
- Smaller movements in spreads occur more frequently – the MA is intended to prevent these causing artificial volatility on balance sheets



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Long-Term Guarantees Measures

- Both measures require supervisory approval
- Firms must disclose that they are using a particular measure and must consider the impact of the measure not being in place as part of the ORSA
- Where the reduction of the MA or the VA to zero would result in non-compliance with the SCR, firms also need to submit an analysis of the measures it could apply in such a situation to re-establish the level of eligible own funds covering the SCR or to reduce its risk profile to restore compliance with the SCR

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Practical implementation issues

Matching Adjustment vs Volatility Adjustment

- A key choice for many firms will be what adjustment to apply for and for which parts of the business, e.g.
  - Matching Adjustment/Volatility Adjustment for all business
  - Combination of the adjustments
- There are benefits are limitations with each:
  - MA is tailored to the firm's asset-liability profile and will provide the best protection against artificial volatility on the balance sheet…
  - …but also restricts the investment options and liability structures
  - VA gives more freedom with investments and less maintenance/justification required as to why the portfolio meets any criteria…
  - …but basis risk exists between the calibration of the adjustment and the actual assets held.
- More choices exist if transitional measures are also considered

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Practical issues implementing the Matching Adjustment

- For firms looking to use the MA there are a number of practical considerations
- How to interpret buy-to-hold and what permits rebalancing
  - E.g. Can firms rebalance where changes in default expectations lead to a change in the expected asset cashflows
- How to write new business into a MA portfolio
  - Will the PRA effectively approve a methodology which can then be applied to all MA compliant liabilities?
  - Will separate applications be required for sufficiently large portfolios of new business?
  - Can materiality be used to incorporate new business into approved portfolios?
- For internal model firms with IMAP dates after the date for applying for MA approval, further issues arise as the matching asset portfolio must be in place in time for the MA application
  - The capital implications of the portfolio will potentially look very different under standard formula as opposed to under an internal model

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In payment and deferred annuities

- Standard in-payment annuities with no policyholder options, other than surrender payments where the surrender value does not exceed the value of the assets, would appear to have no problem under the MA criteria.
- Deferred annuities, however, may carry the additional uncertainty associated with early or late retirement, transfers or cash commutations
  - Where restrictions are in place as to the maximum value of transfers or cash commutations these should meet the eligibility criteria for the MA
  - Where the firm controls the basis used to calculate the value of transfers, cash commutations or early and late retirements, deferred annuities may meet a pragmatic interpretation of the MA

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Equity release mortgages

- Equity release products are increasingly gaining recognition as alternative solutions for retirement
- However, significant uncertainty remains around whether these would be eligible for the MA
  - Concerns focus around the existence of No Negative Equity Guarantees (NNEG) and the longevity risk exposure of the mortgage
- Insurers have attempted to highlight the similarity between an NNEG exposure and Corporate Bond default risk while the longevity risk exposure could be mitigated through a longevity swap
  - When the mortgage holder dies and / or sells the property because of move to long term care etc, then the mortgage writer will recover the lower of the accumulated balance of mortgage and the sale price of the property
  - Given the initial loan to value of property and long-term expected house price inflation, this will be reasonable remote risk exposure
  - This has been compared to a default event for a corporate bond where the lender only recovers a proportion of the capital lent

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Equity release mortgages

- Further questions arise as to whether ERM assets have a spread risk exposure given the security of the asset is not dependent on the borrower's ability to service the loan ie their credit worthiness
- Given the collateralisation against residential properties, the economic risk is generally seen as classified essentially as exposure to residential property values
- While it may be possible to justify this within an internal model, the standard formula does not allow these economic arguments to be presented

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Conclusions

- At face value, products with long-term guarantees do not appear to be efficient under Solvency II
  - Potentially incurring high capital changes and excessive artificial volatility onto the balance sheet
- While solutions have been incorporated into the revised versions of the regulation, the ability for insurers to provide effective and affordable retirements solutions will depend to a large extent on a pragmatic interpretation of the Matching Adjustment requirements by the PRA
- Without such pragmatic interpretations, there is the risk that products are withdrawn, guarantees are reduced or the costs of such features passed on to policyholders

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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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