Institute and Faculty of Actuaries

Life Board and Life Research Committee

Equity Release 2016 Working Party

Overview

The expansion of insurers investing in the ERMs, and the asset's long term use to back annuity portfolios, brings ERM into scope of the "matching adjustment" of Solvency II. In an interconnected move the PRA have issued a DP on equity release which, among other matters, questioned the asset value placed on such mortgages for Solvency II purposes (and possibly IFRS purposes).

Actuaries are closely involved in the valuation of ERMs, their use for backing various portfolios of insurance products, and their restructuring into acceptable forms for the matching adjustment. Given the PRA's DP the IFoA wishes to develop both insights into the range of current approaches to managing ERM portfolios and suggested common actuarial practice for some elements of their management and valuation.

Working party objective / aims:

1. To assist the Life Board and Life Research Committee to identify and promote new research on this current hot topic
2. Preparation for any future consultation responses should the PRA's DP move to a CP
3. Standards – and implications for IFoA regulation and whether a SORP may be useful
4. A review of the consequences for the IFoA from the variation in valuations placed on ERMs, often through actuarial assumptions on common economic factors
5. To present at IFoA Conferences such as Life Conference 2017
6. To produce a final report.

The research for the working party will be arranged into five work streams:

1. Overall valuation of ERMs and current practice compared to the early 2000s IFoA reports on ERMs
2. Approaches to the important no negative equity guarantees and the PRA's questioning of assumptions underlying this NNEG
3. Possible solutions being developed for restructuring ERMs into forms acceptable to the PRA to approve under a management adjustment application
4. Detailed implications for assumptions used in valuing, and in stressing, the ERM valuation whether as a standalone asset or within a structured note. Comparison of current assumptions to the early 2000s IFoA working party reports
5. In response to the PRA DP is there an appropriate limit to the amount of ERM risk adjusted spread over risk free that could reasonably be taken as a matching adjustment. If not then a discussion of the equivalent position on corporate bonds and whether these asset classes are just not comparable.

Further detail on the five work streams is given below

1. Valuation methodology of ERMs
    - Building on the earlier ERM working party reports of the early 2000s how has practice developed, how do valuation methods compare; namely-.
        - amortising deferred premium, by cohort, initially set to true up day 1 transaction
        - discount rate, by cohort, initially set to true up day 1 transaction
        - single discount rate for all cohorts set by latest cohort true up to transaction
    - How are changes to day 1 gain recognition being processed for old blocks and for new business?
    - Where day 1 gains are taken does the discount rate used sit well with Solvency II discount rates?
    - Are discount rates re-assessed post day 1, for existing business, and should they be?

2. Valuation of the NNEG
    - What are the limitations to the typical Black Scholes methodologies used, the quantification of any such limitations, and where Black Scholes would not be appropriate
    - What property growth rates are appropriate for the BS formulae e.g. risk free, real world growth
    - What discount rate are appropriate for the NNEG cash flow deductions

3. Valuation methodology of structured notes
    - Scenarios used for rating methodology of notes, how extreme should they be and how do they vary by target rating of the note
    - Which risks are included within rating frameworks
    - What qualitative assessments are necessary in addition to quantitative
    - How do we map back the models to the rating class required to set fundamental spreads

4. Assumptions
    - What margins for uncertainty should be included within early repayment rates
    - Are deterministic early repayment rates sufficient i.e. are the significant interactions with other
    - assumptions that should be allowed for stochastically
    - What are reasonable property volatility assumptions
    - How much should be allowed for idiosyncratic risk of ERMs e.g. dilapidation, basis risks
    - House price inflation
    - How to, or should we, allow for where the economy is in the property price cycle

5. Matching adjustment
    - Should there be limits on the amount of spread that can be taken into the matching adjustment under stress

Sources of information

- a literature review of existing resources and platforms including textbooks, academic and Commercial papers, and other professions' sources
- any international practices to identify learning that is relevant and transferable to the UK,
- survey of current ERM investors and their methods and assumptions
- Prior ERM reports

Membership and timetable

We are seeking volunteers with specific experience of working with ERMs. IFoA members or non-members with demonstrated relevant experience would be welcomed.

Participation in this working party will be by conference call to allow us to widen this opportunity to all members. Calls will be arranged at a mutually convenient time for all involved. If you live or work near to one of the IFoA offices, you are welcome to make use of our facilities for the call. Similarly, if more than one member of the working party is based close to each other, you may agree to meet up and dial in together, but there will be no requirement for volunteers to meet in one place.

Executive Support: Practice Manager and Practice Coordinator

Timetable – report by early 2017 with material work achieved by end 2016

September 2016