Institute
and Faculty
of Actuaries

CP24/17: Solvency II: Internal Models Modelling of the Matching Adjustment

IFoA response to Prudential Regulation Authority

9 March 2018

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Actuaries' training is founded on mathematical and statistical techniques used in insurance, pension fund management and investment and then builds the management skills associated with the application of these techniques. The training includes the derivation and application of 'mortality tables' used to assess probabilities of death or survival. It also includes the financial mathematics of interest and risk associated with different investment vehicles – from simple deposits through to complex stock market derivatives.

Actuaries provide commercial, financial and prudential advice on the management of a business' assets and liabilities, especially where long term management and planning are critical to the success of any business venture. A majority of actuaries work for insurance companies or pension funds – either as their direct employees or in firms which undertake work on a consultancy basis – but they also advise individuals and offer comment on social and public interest issues. Members of the profession have a statutory role in the supervision of pension funds and life insurance companies as well as a statutory role to provide actuarial opinions for managing agents at Lloyd's.

Institute
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CP24/17
Prudential Regulation Authority
20 Moorgate
London
EC2R 6DA

9 March 2018

Dear Sirs,

IFoA response to Consultation Paper CP24/17: Solvency II Internal Models - Modelling of the Matching Adjustment

1. The Institute and Faculty of Actuaries (IFoA) welcomes the opportunity to respond to the PRA's consultation paper (CP) on Internal Models and the Modelling of the Matching Adjustment (MA). Our Life and General Insurance Standards and Consultations sub Committees (LSCC/ GISCC) and Life and General Insurance Boards have been involved in the drafting of this response. Members of these Committees and Boards have been actively engaged with the development and management of Internal Models and the MA, in both life and general insurers.

2. We welcome the fact that CP24/17 provides clarity on the PRA's expectations for the modelling of the MA within the Solvency Capital Requirement (SCR) calculation. The CP draws together guidance previously shared by the PRA and earlier Supervisory Statements; it also expands on the PRA's expectations in a number of areas. This is helpful as it will give firms increased certainty when applying for Internal Model approval. It will also encourage firms to improve their internal processes.

3. In some areas CP24/17 is reiterating current practice. However, there are also a number of areas where new expectations have been laid out:

   - the PRA has provided specific areas they expect to see addressed in the validation of the MA calculation. For instance, the MA benefit firms achieve needs to be validated using a method which is independent to that used to calibrate the stresses;
   - the PRA expects firms to be able to determine the credit rating of each asset under the modelled stress;
   - firms with material exposure outside of corporate bonds (e.g. illiquid assets), will require their own calibration for these assets individually, in terms of having an appropriate methodology to assign a credit rating and an appropriate Fundamental Spread (FS) for these asset classes;
   - a more detailed investigation of concentration risk is required;
   - firms should also consider explicitly the impact of underwriting risk stresses (e.g. longevity) on the MA portfolio liabilities, and any risks arising from additional long-dated assets; and
   - there is an emphasis on how firms demonstrate that the actions they propose to take to re-establish matching reflect the source, nature and the severity of the stress event (e.g. a credit default, migration, longevity).

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4. At a practical level to meet these requirements, most firms will need to invest in their current processes, and potentially revise or reapply for the MA benefit they currently report and manage. For instance, some firms currently do not model the credit rating of individual assets under stress and adopt an 'average credit rating' or 'median rating' approach. We suggest that the requirement for a credit rating for every asset under stress is excessive, and may be unworkable in practice. The additional guidance outlined in CP24/17 could result in material changes to approved models and processes for a number of firms if the new Supervisory Statement is implemented as drafted. The PRA should revisit its view that there is sufficient benefit from these proposals to justify the additional cost and complexity.

5. While it is important that firms hold an appropriate amount of capital, and the MA under spread needs to be based on sound methodologies and analysis, excessive rules and complexity in modelling may act against good risk management. Much of the Supervisory Statement, and preceding Directors' letters, are helpful guidance to firms but we would encourage the PRA to be open to firms proposing alternative proportionate/ simplifying methods where these are more practicable and allow similar conclusions to be reached. This is particularly the case where the MA portfolio is a small proportion of the business within the Internal Model.

6. We would also welcome more clarity on any additional considerations that firms should take into account when modelling private credit assets under stress.

7. In addition, we have a number of areas of concern, relating to specific paragraphs of the draft new Supervisory Statement:

8. Paragraph 1.8 notes the PRA may issue further bespoke expectations for illiquid assets (among other assets). This continued uncertainty over the attractiveness of illiquid assets is unhelpful to good business and risk management. We suggest the PRA give a clear, and short, timeframe for when its wider expectations might be published, including whether the PRA might revoke its approval of existing internal models that cover illiquid assets.

9. Paragraph 4.7 requires a credit rating model that applies at the level of 'each asset'. In our view this should be made more proportionate, such as an aim to reflect assets by a suitable level of granularity, and not automatically modelling each asset.

10. Paragraph 4.9 develops the modelling of the FS from the requirement at paragraph 2.5 that it is not mechanistic. However, paragraph 4.9 (and thereafter) appears to demand departure from EIOPA's broader methodology. These paragraphs suggest the FS should be granular to a level of assets outside the current EIOPA range of rating term and sector. Indeed they seem to require modelling of an FS that tries to encompass the degree of basis or concentration in the firm's portfolio. We suggest this is attempting to place too much into a model that is an estimation not an exact forecast, and inducing complexity that can only hinder risk management.

11. These proposals for the modelling of the FS are inconsistent with paragraph 4.31 of the CP, which states that this should be 'consistent with the methods used by EIOPA to determine the FS calibration for the purposes of calculating TPs'. . They confuse the modelling of the asset rating (and its mapping to a published FS), and the FS in stress itself. Furthermore, it is difficult to see how a firm would manage the portfolio, and report on its profit and loss, with a model of FS actions that are outside of EIOPA's plausible remit.

12. We suggest that the PRA could provide more guidance on basis risk (4.11) and concentration risk (4.12-4.16), as it is not clear how firms could incorporate these into their models based on what is set out there.

13. We would question why firms cannot allow for actions to optimise their portfolio under stress, as in paragraph 5.4. As long as sufficient evidence is provided to show that this can be achieved, it would appear to us to be a reasonable approach.

14. In relation to paragraphs 5.13 and 5.14, the interpretation that all new assets to be reflected in the SCR need to be purchased within the two-month timeframe for restoring MA compliance seems very strict. An alternative interpretation is that any mismatch in the MA portfolio needs to be brought back within tolerance within two months, but that firms could purchase new assets over a longer period than two months. A firm might initially rebalance its position using lower yielding assets such as gilts and cash and then replace with higher yielding assets over the remainder of the year (the projection period for the SCR calculation).

15. Still in relation to these paragraphs, the new Supervisory Statement also disallows assumed investment in 'illiquid assets'. This term is ill-defined and potentially too restrictive, and could well encompass vanilla corporate bonds in certain market conditions. In our view, assumed investment should be allowed where the firm can justify its approach based on previous market experience, for example through having a pipeline of illiquid asset investments.

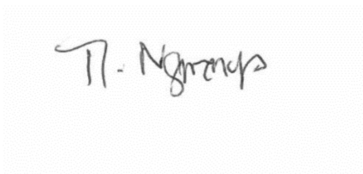
16. Paragraph 6.4 calls for allowance for longevity risk, and this is followed up in paragraph 6.5 with the expectation that a firm with a partial internal model would extend it to more of the risks in an MA portfolio. This seems disproportionate and at odds with the underlying reasoning for the approval of the partial internal model. It seems difficult to justify this proposal as it effectively requires firms to have an internal model covering significantly more of its business than it applied for.

17. Paragraph 6.8 requires validation using a different method than the original modelling of the MA in stress, which implies maintaining two different and independent models. Given the higher level of granularity and analysis the PRA is proposing, it is not clear what alternative validation techniques would capture these complexities. If this is to be a requirement, then we believe the PRA should outline what these techniques could be.

Should you wish to discuss any of the points raised in further detail please contact Steven Graham, Technical Policy Manager (steven.graham@actuaries.org.uk / 0207 632 2146) in the first instance.

Yours sincerely

Marjorie Ngwenya



President, Institute and Faculty of Actuaries