# Matching Adjustment attestation - How granular do you go?

### **Solvency UK Taskforce**

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To carry out the analyses needed to produce the Matching Adjustment attestation obviously requires a degree of sub-division and the consideration of granularity. Given the large variation of different asset types within a typical Matching Adjustment Fund (MAF), some degree of break-down will clearly be necessary, but how far should this go? Too much granularity risks the analyses being affected by lack of data or by "noise" obscuring the underlying position. Too little granularity and the credibility of the attestation may be called into question. A starting point might be the following breakdown, which is a reasonably standard listing of the various asset types within a more complex MAF such as that within a typical BPA insurer. For the avoidance of doubt, the suggested breakdown is consistent with the various levels of sub-division and granularity that we would expect BPA insurers to use, for example in the credit risk modules of internal models.

## Listed fixed interest assets with external credit ratings (including listed corporate bonds)

- Split by sector (financial and non-financial issuers) (Note: A more granular split by sector could also be considered but financial/non-financial is the main one)
- Split by (notched) credit rating
- Split by underlying territory
- Split by currency
- Split by outstanding term to redemption
- Split by with/without optionality (e.g. optional redemption dates)

### Restructured assets (including Equity Release Mortgages and other assets such as callable bonds)

- Split by sector
- Split by (notched) credit rating (normally internal, but could be external)
- Split by underlying territory
- Split by currency
- Split by outstanding term to redemption

• For restructured Equity Release Mortgages: Size of Effective Value Test (whether set to the minimum or with a buffer)

## Private/non-listed/alternative types of asset without external credit ratings

- Split by type (e.g. private equity, ground rents, infrastructure equity, infrastructure debt, secured loans/financing, commercial real estate loans etc)
- Split by underlying territory
- Split by currency
- Split by expected outstanding term to completion/expiry
- Split by internal credit rating
- Equity release mortgages (as a separate category due to the existence of the Effective Value Test, unless already covered in restructured assets above)

In addition to the asset classes listed above, there may be other assets, such as assets with highly predictable (HP) cash flows, which may not fall directly into any of the categories included above, but which may still need to be considered.

#### Other areas to consider

The analyses could also be expanded to consider assets outside of the MAF where such assets have similar characteristics to assets in the MAF. This may increase the amount of data relevant to the analyses of the assets inside the MAF and help achieve greater statistical credibility.

Additional considerations in carrying out the analyses may include:

- It may be necessary to consider trade-offs between, for example, sufficiency of granularity and availability of data. For example, private / non-listed (or illiquid) assets may exhibit a large variety in risks and features (hence indicating granularity of data may be more needed) where data may be scarce (despite being more needed).
- One may need to consider basis risks caused by, for example, exposures with a higher degree of concentration within heterogenous buckets than external data or indices.
- How far back in time the analyses should seek to go. Repeating the analyses over different years/periods could give more useful information, but this needs to be balanced against having too much information which might give conflicting results.
- Whether multiple sources of asset valuation and data may give different results (although if this were to be the case, it would not be unique to attestation).

#### Conclusion

Granularity along the above lines is likely to be more than sufficient – just on the grounds that the above is very detailed (whilst recognising that one can always add more detail). The question is then whether the above is too much granularity? One way to assess this is to commence the analyses using this granularity and see where it takes you. It may soon become clear that there are no or limited assets within any particular "cell", or that other required data to do the analyses is not available at the level of granularity in question, and this will then act to combine some of the cells and reduce the level of granularity. Conversely, commencing using this level of granularity may flush out some cells where a divergence of asset characteristics within a cell emerges, and that could be the signal for a further division. None of this is rocket science – just a pragmatic actuarial approach of starting somewhere sensible, carrying out some trial analyses, and then adjusting in whatever direction(s) seem appropriate based on the trial results – or indeed on what is needed to actually obtain a trial result.

The bottom-line question for any asset or group of assets is whether or not an FS add-on is needed in order to provide the attestation, and how much that add-on should be. This needs always to be borne in mind so that the final analyses, at the final level of granularity, supports where FS add-ons have and have not been applied.

### With thanks to the peer reviewers and Life Board reviewers: Clarence Er, Natalia Mirin, Tom Kenny.

#### **Published by**



#### Solvency UK TaskforceSolvency UK Taskforce

Thanks to <u>Florin Ginghină MSc FIA FCCA</u> and <u>John Jenkins</u> for their article, the second article from the <u>Institute and Faculty of Actuaries</u> Life Board sponsored <u>Solvency UK</u> <u>Taskforce</u>, on what level of granularity to perform the analysis for the Matching Adjustment attestation.

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