

CP19/23 – Review of Solvency II: Reform of the matching adjustment

What are the main takeaways?

Claire Booth, FIA, CERA
Robert Bugg, FIA
Neil Christy, FIA, CERA
Jessica Crowson, FIA

Florin Ginghină, FIA
Dilesh Patel, FIA
Lyndsay Wrobel, FIA



On 28 September 2023, the Prudential Regulation Authority (PRA) published its Consultation Paper 19/23 (CP19/23) covering the second set of proposed reforms to Solvency II in the UK. The CP forms part of the wider ongoing review of the UK's insurance regulatory environment led by the UK government and in particular HM Treasury (HMT).

The reforms under the Solvency II review are being delivered through a combination of the Financial Services and Markets Bill (FSM Bill, which received Royal Assent in June 2023), HMT's Statutory Instruments (SIs) and changes to the PRA's rules and policy.

In December 2022, HMT published a [policy statement](#) on its implementation plan to deliver a new regulatory framework for financial services regulation in the UK. The legislative changes needed to enable the new regulatory framework are being brought in by the FSM Bill, which gives HMT power to revoke retained European Union (EU) law relating to financial services, including Solvency II.

As part of its plans to legislate directly to implement certain parts of the Solvency II reform package, HMT set out its approach in [draft SIs](#), which brings forward reforms to the risk margin and certain aspects of the matching adjustment (MA).

Those parts of the reform package not contained in legislation are intended to be implemented through changes to PRA rules and other policy material. The PRA is consulting on its approach to adapting Solvency II for the UK market in two tranches:

- Consultation Paper 12/23 ([CP12/23](#)), published in June 2023, which sets out the majority of the PRA's reform proposals, focusses on simplification, improving flexibility and encouraging market entry. Milliman has previously produced a [summary paper](#) on the proposals set out in CP12/23.
- [CP19/23](#), which sets out the PRA's reform proposals for life insurers relating to the Matching Adjustment.

This paper addresses the proposed changes in CP19/23, namely:

- **Investment flexibility** - Widening the range of assets which may be held in MA portfolios
- **Liability eligibility** - Allowing the MA to be applied to a wider range of insurance products
- **Credit ratings under the MA** - Including removing the limit on the MA arising from sub-investment grade assets, clarifying risk management requirements for sub-investment grade assets (SIG assets) and converting expectations on internal credit assessments to requirements
- **MA Permissions, Breaches and Consequential Rule changes** - Including a new MA eligibility condition to demonstrate compliance with the Prudent Person Principle (PPP), streamlining the MA application process for certain assets and increased proportionality for breaches of MA conditions
- **Attestation** - Introducing the requirement for fundamental spread (FS) and MA attestation
- **Assumptions underlying the MA**
- **Matching Adjustment Asset and Liability Information Return (MALIR) data collection** - Formalising regulatory data requests on the MA through a new template
- **Notching** - Increased granularity in the FS, including notching where appropriate

Proposed updates to the PRA Rulebook, SS7/18 on the matching adjustment, SS8/18 covering internal models, SS3/17 on illiquid unrated assets, SS1/20 on the Prudent Person Principle, a draft statement of policy covering MA permissions, MALIR instructions and a MALIR reporting template have been published alongside CP19/23.

Responses to the consultation are requested by Friday, 5 January 2024.

Subject to responses received, the PRA expects to issue the final policy in relation to the MA proposals during Q2 2024 with an effective date of 30 June 2024. All other changes related to the UK review of Solvency II are expected to take effect on 31 December 2024 with the notable exception of the proposed changes to the risk margin, which will take effect from 31 December 2023. Details of the changes to the risk margin are summarised in the Milliman paper on CP12/23.

Reforms to the Standard Formula SCR framework will be considered at a future point in time.¹ As part of this, the PRA will consider whether related reforms are necessary to ensure that the Standard Formula SCR framework remains coherent with the final MA rules.

Investment flexibility

Investment flexibility is one of the most anticipated areas of the consultation, with proposals to widen the range of assets that can be included in firms' MA portfolios being its central piece.

The current Solvency II framework requires cash flows of MA asset portfolios to be fixed and not capable of being changed by the issuers of the assets or any third parties.

For assets that do not meet MA eligibility criteria in the current Solvency II framework, firms may undertake certain risk transformation transactions to obtain a portfolio of MA eligible assets. For example, firms may enter securitisation transactions or put in place hedging arrangements. Current market practice is for firms to restructure non-MA eligible assets into senior, investment grade notes (with fixed asset cash flows) through a subsidiary company set up for this purpose, i.e., a special purpose vehicle (SPV). Subject to meeting all relevant rules and regulations, firms can include the notes in MA portfolios.

The HMT's [draft SIs](#) include proposed changes to the MA framework to permit assets that do not have fixed cash flows.² In line with these requirements, the policy proposals included in CP19/23 are to allow firms to invest in assets with highly predictable, but not fixed, (HP) cash flows subject to:

- An allowance being made for the additional risks (relative to fixed cash flows) in these assets
- The aggregate MA benefit from assets with HP cash flows being a maximum of 10% of the overall MA benefit claimed

The PRA considers that assets with HP cash flows will introduce additional retained risks and sources of cash flow uncertainty to firms' MA portfolios. The policy proposals introduce new rules and expectations in relation to these additional risks:

- Criteria for assets with HP cash flows to be included in firms' MA portfolios
- Controls on the quality of matching to account for the additional sources of cash flow uncertainty introduced by the extension to asset eligibility
- Approaches for the determination of FS additions for the additional retained risks
- Approaches for the determination of best estimate cash flows for these additional assets

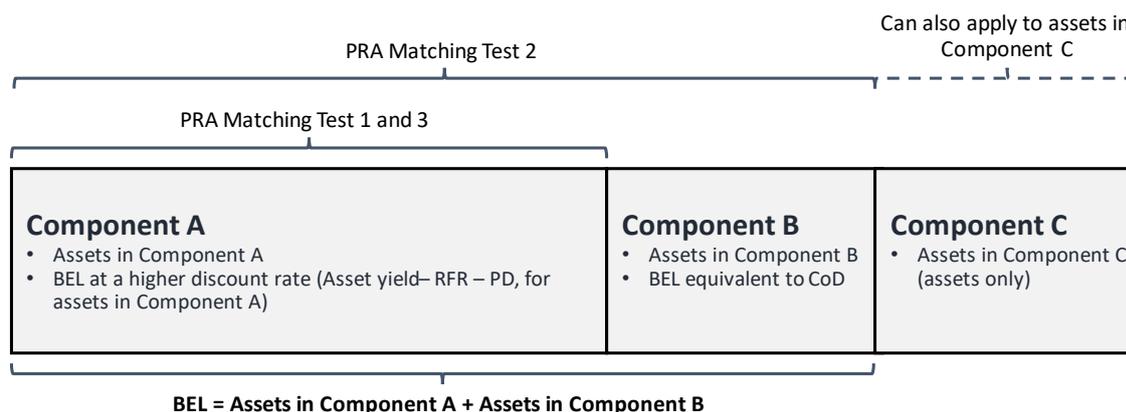
We discuss the new rules and expectations in more detail in the following sections. As a knowledge refresher, a graphical representation of an MA portfolio under the current Solvency II framework is shown in Figure 1 below.

¹ The PRA has not confirmed the timeline for proposals on reforms to the Standard Formula.

² The requirements included in HMT's draft SIs related to assets with highly predictable cash flows are twofold:

- The risks to the quality of matching are not material.
- Assets with non-fixed cash flows represent only a limited proportion of the portfolio.

FIGURE 1. GRAPHICAL REPRESENTATION OF AN MA PORTFOLIO UNDER THE CURRENT SOLVENCY II FRAMEWORK



Where:

- $FS = \max (35\% * LTAS, PD + CoD)$
- LTAS, PD and CoD are based on 30-year averages

Note: A sub-investment grade cap is applied to MA.

As shown in Figure 1, an MA portfolio comprises of three components under the current Solvency II requirements:

- Component A, which comprises liability cash flows and asset cash flows (which, when de-risked, match liability cash flows) that generate the yield required for the MA calculation. PRA Matching Tests 1 and 3 apply to asset and liability cash flows in Component A.
- Component B, which comprises assets equal to the cost of downgrade (CoD) component of the FS. PRA Matching Test 2 applies to assets and liabilities in Component A and B (although some firms also include assets in Component C).
- Component C, which comprises surplus assets.

BEL is notionally split across Component A and B. In other words, BEL is equal to the sum of assets in Component A and Component B.

All eligible assets in an MA portfolio are subject to the FS published by regulators, and all firms apply and use the same MA methodology. This also includes the cap applied to the MA benefit for SIG assets.

ASSETS WITH HP CASH FLOWS

The current Solvency II framework gives examples of assets that would not meet the fixed asset cash flows criteria,³ mainly due to potential variability in respect of the timing and/or amount of the cash flows.

As expected, the policy proposals included in the consultation define assets with HP cash flows as follows:

- The contractual terms of the asset provide for a bounded range of variability in respect of the timing and amount of the cash flows.
- Failure to meet such contractual terms is a default.

³ For example, paragraph 2.19 in Supervisory Statement 7/18 reference assets with “[...] rights of redemption or termination that are entirely at the discretion of the issuer or third party [...]”.

In addition, assets with HP cash flows must have a credit quality capable of being assessed through an external credit rating or the undertaking's internal credit assessment of a comparable standard.⁴ The contractual bounding requirement mentioned above would act to support both the credit assessment process and determining when an asset defaults.

Subject to meeting the criteria for assets with HP cash flows, firms would be able to include these direct in MA portfolios, or through creating mezzanine notes as part of a restructuring (noting that restructuring is permitted under the current Solvency II framework, as mentioned above), where those notes have HP cash flows.

Broadening the MA asset eligibility criteria to allow assets with HP cash flows will be a welcome addition to the MA framework. The current fixity requirement for asset cash flows means firms have had to implement complex and costly structures for assets with HP cash flows. These structures may no longer be required for eligible assets with HP cash flows. Amongst assets that may become MA eligible under the policy proposals are those with prepayment risk (e.g., callable bonds) or construction phases (e.g., infrastructure projects). The proposals also mean that, where firms have structures in place for assets with HP cash flows, they may include these in unstructured form going forward (although this would require a new MA application), subject to the proposed restrictions on investments in HP assets described in CP19/23.

As expected, in return for broadening the MA asset eligibility criteria, the policy proposals introduce new tools and controls. These are discussed in the following sections.

CONTROLS ON THE QUALITY OF MATCHING

As mentioned above, the policy proposals include controls on the quality of matching to account for the additional sources of cash flow uncertainty introduced by the extension to asset eligibility.

The PRA considers that assets with HP cash flows exhibit two types of variability:

- **Economic (pure) variability** – Mostly seen in callable bonds, where there are often strong market price signals indicating the expected redemption date reflecting rational economic behaviour. Other examples include rent increases linked to an index and prepayment behaviour under residential mortgage-backed securities that is linked to the economic cycle..
- **Non-economic (event) variability** – Mostly seen in assets where the borrower has options that are contingent on specific events specified in the contract, such as an option to redeem at par on the receipt of an insurance payment in the event of the destruction of the underlying asset.

The PRA considers that both types of events can result in cash flows being received earlier than expected, cash flows of a different amount being received, and future contractual payments being of different amounts and/or timing. These risks can broadly be categorised as reinvestment risk or liquidity risk, which the PRA proposes should be mitigated in part through additional controls on the quality of matching.

Under the proposed consultation, the control framework for an MA portfolio is extended and amended as shown in Figure 2 below:

FIGURE 2. SUMMARY OF CONTROLS ON THE QUALITY OF MATCHING

CONTROLS ON THE QUALITY OF MATCHING	DESCRIPTION
Cap on MA benefit generated by assets with HP cash flows	The policy proposals include a maximum of 10% of the total MA benefit. The PRA included this control within the list of 'appropriate safeguards,' where it is described as a total exposure control.
Additional appropriate safeguards	Apart from the 'total exposure control' mentioned above, these include individual asset or group of assets safeguards, such as exposure limits proposed by firms and should reflect the firms' investment and risk management expertise and the experience data available with respect to the additional risks. The PRA also expects the additional safeguards would become part of the MA permission conditions. ⁵

⁴ The PRA's expectations with regard to firms' internal credit rating assessments are set out in Chapter 2 of Supervisory Statement 7/18.

⁵ The PRA notes that such safeguards may support the PRA in reaching a decision on the MA application where it helps address limitations in FS addition modelling approaches, and/or to support the use of a streamlined MA application process.

CONTROLS ON THE QUALITY OF MATCHING	DESCRIPTION
Additional matching tests	The introduction of two further matching tests, applicable only to firms holding assets with HP cash flows in their MA portfolio. These are discussed further below.
Minor amendments to PRA matching Test 1 and Test 2	<p>The amendment to PRA Matching Test 1 will permit firms to use a more frequent modelling interval than the current requirement of annual.</p> <p>The amendment to PRA Matching Test 2 is to expect firms to model HP cash flows with a cash flow pattern that is consistent with the market stress scenario being applied, e.g., impact of interest rate stress scenario on callable bonds cash flows.</p>

The additional two matching tests introduced in the consultation are discussed below.

- Matching Test 4**, 'MA Loss Test for assets with HP cash flows,' would assess reinvestment risk by considering the MA benefit loss that may occur should HP cash flows not be received as expected.

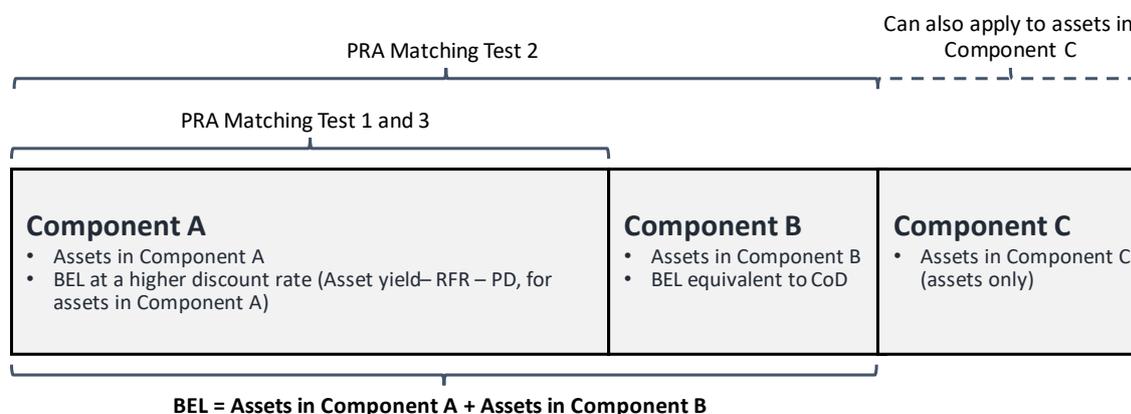
The test requires firms to model the worst MA benefit scenario for each asset with HP cash flows, and where this results in the asset being redeemed earlier than expected, firms may assume the proceeds are invested at a prudent rate for the residual term outstanding.
- Matching Test 5**, 'Modified Accumulated Cash Flow Shortfall Test,' would assess the additional liquidity risk that may occur should HP cash flows not be received as expected.

The test is broadly of the same format as Matching Test 1, except that for assets with HP cash flows, the test requires that the cash flows are extended to the longest date possible under the contract, taking credit for any coupons (including coupon step-ups) that arise from the extension.

A graphical representation of an MA portfolio under the proposed consultation and comparison with the current Solvency II framework is shown in Figure 3 below (charts not at scale).

FIGURE 3. GRAPHICAL REPRESENTATION OF AN MA PORTFOLIO UNDER THE CURRENT SOLVENCY II FRAMEWORK AND PROPOSED CONSULTATION

(a) Under the current Solvency II framework



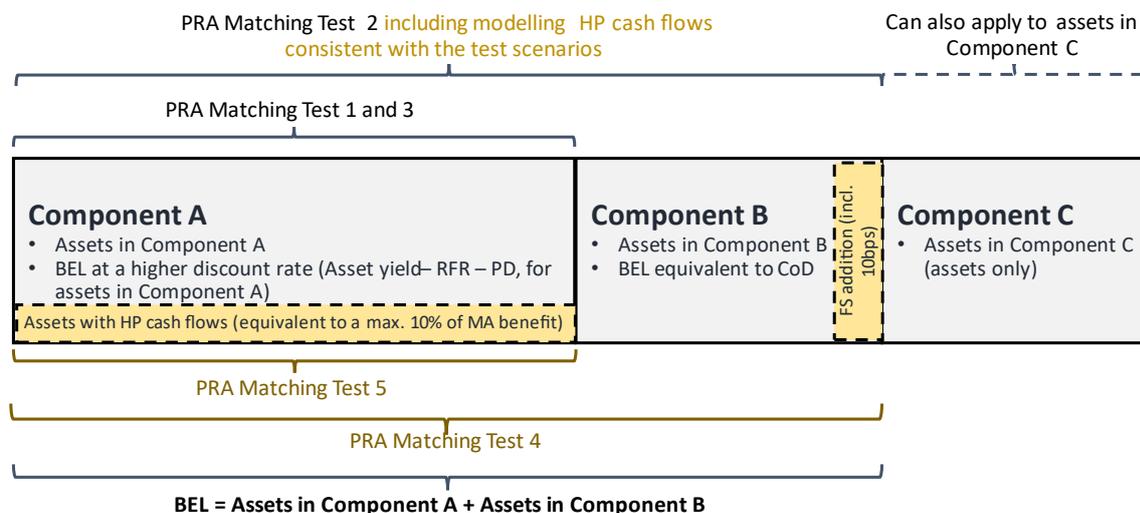
Where:

- FS = max (35% * LTAS, PD + CoD)
- LTAS, PD and CoD are based on 30-year averages

Note: A sub-investment grade cap is applied to MA.

FIGURE 3. GRAPHICAL REPRESENTATION OF AN MA PORTFOLIO UNDER THE CURRENT SOLVENCY II FRAMEWORK AND PROPOSED CONSULTATION (CONTINUED)

(b) Under the proposed consultation



Where:

- $FS = \max (35\% * LTAS, PD + CoD) + FS \text{ addition}$
- LTAS, PD and CoD are based on 30-year averages

Legend: Amber reflects assets with HP cash flows.

Note: The FS addition shown in Figure 3 above comprises of the addition required for assets with HP cash flows, as described below, and any other addition (e.g., for SIG assets).

The two additional tests included in the consultation proposals would apply to Component A and Component B (PRA Matching Test 4) and Component A (PRA Matching Test 5).

Without carrying out any detailed calculation, it could be argued that under the consultation proposals, the size of Component A would be expected to reduce when assets with HP cash flows are included as they are expected to attract a higher yield, whilst the size of Component B would increase due to the FS addition – discussed further below. The overall impact on the size of firms' MA benefits will depend on several variables, but primarily this will be a function of the relative MA benefit of assets with HP cash flows versus any applicable FS addition.

FUNDAMENTAL SPREAD ADDITIONS FOR ASSETS WITH HP CASH FLOWS

The PRA reiterates in CP19/23 that the FS should reflect all the risks retained by firms. As described above, assets with HP cash flows have additional risks, including reinvestment and liquidity risks, which are not captured in the specification of the FS and the assets used in the calibration of the FS tables published by the PRA.

An overarching principle is that the reward for the additional risks due to a lack of cash flow fixity should not give rise to an MA benefit (to earn returns with high confidence). The PRA considers that the part of the spread that arises from lack of fixity of cash flows should be part of the FS.

Under the policy proposals, the PRA considers that, for a diversified portfolio of exposures that have HP cash flows, firms could make an adequate allowance for the risks arising from cash flow variability by targeting a percentile of the distribution of potential losses. Firms should also model a term structure for the addition to the FS, unless it can be demonstrated that a uniform allowance would not materially affect the adequacy of the allowance and the assessment of the quality of cash flow matching.

Under the policy proposals, the additional FS allowance for assets with HP cash flows would be captured in Component B of MA portfolios, which is broadly equivalent to the cost of downgrade component of the FS. The PRA also expects firms to hold a minimum allowance for the risk of additional reinvestment or rebalancing costs for the MA portfolio for assets with HP cash flows; the PRA states in the proposed updates to SS7/18 that an allowance of 10 bps would generally be expected to be adequate in normal market conditions.

The policy proposals include two groups of methodologies for determining the FS addition for assets with HP cash flows: standard methodologies (applicable for initial exposures to assets with HP cash flows) and more sophisticated methodologies.

Standard methodologies for initial exposures

The standard methodologies for determining the FS addition for assets with HP cash flows distinguish between assets with economic variability and those with non-economic variability.

For assets with economic variability, firms could project cash flows on a 'yield-to-worst' basis⁶ together with a minimum FS addition for reinvestment and/or rebalancing cost. This approach would be consistent with modelled economic conditions.

For assets with non-economic variability, the PRA proposes that firms provision a proportion of the difference in MA benefit arising from the worst-case outcome and the MA benefit arising from the best estimate cash flow projection.

The PRA considers that non-economic variability risks are more likely to be best represented by heavier-tailed distributions. PRA considers that an adequate allowance for uncertainty in a diversified range of cash flows is unlikely to be less than 25% of the difference in MA benefit between best estimate and worst-case cash flows at the point of investment, broadly equivalent to the 85th percentile of a fatter-tailed distribution.

More sophisticated methodologies

Firms are expected to consider a range of factors before moving to more sophisticated methodologies for determining the FS addition for assets with HP cash flows, such as variability of cash flows and how these may change over the life of the asset, degree of volatility of the value of the asset, expertise firms have in managing the asset, and adequacy of data and reliance on expert judgement.

Where a firm proposes to develop a more sophisticated methodology, it should consider the appropriateness of the methodology.

Firms should ensure a balance between adequacy of data and reliance on expert judgement.

A blended approach between standard and more sophisticated methodologies is permissible, but firms will be required to justify the proposed approach.

We expect firms to carefully consider the draft requirements for the FS addition (including the allowance for additional reinvestment and rebalancing costs) for assets with HP cash flows, which is expected to be a key factor in deciding whether to invest in assets with HP cash flows.

Whilst some areas included in the consultation may require careful consideration, such as firms' methodologies for the FS addition for assets with HP cash flows, the policy proposals include some welcome clarification, such as confirmation that the FS addition will be included in Component B, that also provisions for the cost of downgrade and any long-term average spread floor components of the FS. There are several areas where this clarification is needed, such as in firms' internal models.

DETERMINING THE BEST ESTIMATE CASH FLOWS FOR ASSETS WITH HP CASH FLOWS

To calculate the MA and demonstrate the quality of matching, firms are required to model a projection of the best estimate asset cash flows. For assets with HP cash flows, the PRA notes that firm may require additional assumptions.

The default approach to model best estimate asset cash flows should be the probability-weighted average of future cash flows (consistent with the approach required to calculate the best estimate liabilities), and this should also apply to assets with HP cash flows.

⁶ A 'yield-to-worst' approach is also an option under the current framework (as indicated in paragraph 2.33 of Supervisory Statement 7/18, which for callable bonds assumes all the coupon cash flows between the first call date and the final legal maturity date are removed, and the notional is returned on the final maturity date.

Alternative approaches are permissible under the current framework, such as taking partial recognition of asset cash flows by applying a 'haircut' to original contractual cash flows (as indicated in paragraph 2.16 of Supervisory Statement 7/18).

The PRA recognises that there might be challenges with this approach for assets with HP cash flows, such as lack of diversification due to relatively small numbers of large investments with HP cash flows, or lack of data on which to base expected probabilities. Therefore, under the policy proposals the PRA proposes that firms tailor their approach to the risks presented by the assets, as follows:

- Use a probability weighted approach where there is data - the PRA considers this as more appropriate for assets with economic variability
- Use a deterministic or median approach where more reliance on expert judgement is required - the PRA considers this as more appropriate for assets with non-economic variability

The policy proposals also set out three principles that should be applied regardless of the approach taken: any expert judgement used in the asset projection should be consistent across the Solvency II balance sheet, firms should maximise the use of market data consistent with the economics of the asset and the cash flow profile should be consistent with the fair valuation under IFRS.

MODELLING ASSETS WITH HP CASH FLOWS UNDER STRESS IN INTERNAL MODELS

Under the policy proposals to modelling assets with HP cash flows under stress, firms' approach to model assets with HP cash flows under stress is expected to be consistent with the best estimate approach.

For assets modelled statistically, the expectation under stress is to update the projected cash flows based on the modelled economic conditions and assuming that counterparties act rationally from an economic perspective.

For assets modelled deterministically, firms are expected to consider how the FS addition may need to be updated for both changes in the stressed cash flow profile and the change in uncertainty about the cash flow profile. The PRA considers that this could result in a material increase to reflect the increased likelihood of early repayment and hence loss of future MA benefit. The policy proposals will require firms to justify the assumptions they make, including how changes to the FS addition correlated with assumptions in the modelled scenario.

Liability eligibility

The PRA proposes that the existing MA liability conditions from the [Solvency II Delegated Regulations](#) are re-stated into the PRA rulebook, with an additional two key changes proposed:

1. Include recovery time risk (the risk that income protection policyholders take longer to recover from sickness than under best-estimate assumptions) as one of the underwriting risk types permitted in MA portfolios
2. Allow the guaranteed benefits component of (immediate or deferred) with-profits annuities to be included in MA portfolios

With respect to recovery time risk, the PRA proposes that there is no limit on exposure to this risk within MA portfolios. This is because it believes recovery time risk to play the same role for in-payment income protection liabilities as longevity risk does for in-payment annuities.

The guaranteed element of with-profits annuities must meet all existing MA eligibility requirements, be clearly identifiable and have no future payable premiums. Future benefits would remain outside of the MA portfolio and firms should establish a policy covering the approach to the addition of future bonuses to the MA portfolio. It is also proposed that firms would need to confirm that they are satisfied that the implications (for example, in terms of investment strategy) for the with-profits business have been considered and discussed with the FCA if necessary.

It remains to be seen whether UK firms will take advantage of the new liability eligibility conditions by incorporating income protection claims-in-payment liabilities or guaranteed benefits associated with with-profits annuities within MA portfolios. There is significant complexity, as well as costs and compliance burdens, associated with establishing MA portfolios, so firms with existing MA portfolios may be the most likely to consider incorporating such liabilities.

Additional complexity could be introduced because with-profits annuity liabilities typically exist within ring-fenced with-profits funds, which may be segregated from existing MA portfolios which are mostly found in shareholder-backed funds. However, such firms may consider whether it is possible to use inter-fund risk transfer arrangements to 'reinsure' the relevant portion of with-profits annuity benefits to shareholder-backed MA portfolios; this could potentially increase surplus in the with-profits fund to the benefit of with-profits policyholders.

Credit ratings under the MA

Credit rating policy proposals cover two areas:

- The treatment of SIG assets
- Internal credit rating assessments for assets within the MA portfolio

INVESTMENT IN SIG ASSETS

In line with the [April 2022 Solvency II review](#) commitment to remove the cap on SIG assets (the so-called BBB cliff) within the MA portfolio, the PRA proposes to remove references to the cap in the relevant regulations (Technical Provisions 7.2(3) in the [PRA Rulebook](#) and certain sections of SS7/18).

Any investment in SIG assets is expected to be at 'prudent levels.' As per the PPP, firms should only invest in SIG assets if they have effective risk management in place to address the associated risks. When considering PPP compliance, firms are expected to consider the lower credit quality and associated cash flow variability, and whether this means the expected cash flows arising from SIG assets can be relied upon for the purposes of cash flow matching.

Further proposals specify that firms should be able to demonstrate that their internal model reflects the risk profile of SIG assets. Key aspects for firms to consider include the availability and credibility of data used to calibrate stresses, assumptions around the level of default under stress and the probability of recovery, heterogeneity of the portfolio, potential concentrations of risks and the risk of forced asset sales under stress.

In practice, the removal of the BBB cliff may lead to greater appetite by firms to invest in SIG assets within their MA portfolios, depending on the risk and reward profile of the assets, capital treatment and firms' risk appetite. Additionally, if firms have investment grade assets that are downgraded to SIG, they would be less obliged to trade out of them and replace with investment grade assets. They could therefore be more selective, looking on an asset by asset basis as to the value and risk for each asset before deciding whether or not to trade. Firms may also look to reassess the rebalancing rules that they apply in their SCR MA under stress calculation.

Some firms have relatively small holdings of SIG assets, and in some cases holdings in SIG assets are temporary. However, if such investments are material, the PRA is likely to seek evidence that firms have robust oversight and internal processes relating to the specific risks associated with SIG assets, for example, work-out capabilities.

INTERNAL CREDIT ASSESSMENTS

Internal credit assessments should be of a comparable standard to those arising from external credit rating agencies (CRAs). Accordingly, the PRA proposes to update the PRA rulebook to require internal credit assessments to:

- Consider both qualitative (e.g., terms and conditions in the loan agreements) and quantitative (e.g., due to economic or market stress) types of credit risk and how they may interact
- Produce ratings that could plausibly be within the range of ratings assigned were the issue to be rated by a CRA
- Ensure that there is broad consistency and no bias, both at the asset type and portfolio level, between the internal credit assessment outcome and issue ratings that could have been produced by a CRA
- Have appropriate validation around the process and an assessment of ongoing appropriateness
- Have independent external assurance that the internal assessment lies within the CRA plausible range
- Be produced by an independent function

Firms should be able to demonstrate compliance with the above requirements to the PRA. Draft SS3/17 text suggests that having sample assets assessed by a CRA will help demonstrate consistency between internal assessment outcomes and CRA issue ratings.

Consistent with the proposals detailed later in this paper to increase the granularity of the FS so it varies by rating notch as opposed to solely full letter ratings, internal credit assessments should also be considered by notch.

Firms should have an internal credit assessment validation framework that covers validation frequencies, coverage sample size and risk tolerance thresholds with respect to the requirements for internal credit assessment comparability to external ratings. Internal credit assessment methodology, assumptions and/or processes should be amended to resolve validation failures. The FS addition may be used to compensate for such failures, should these amendments take time to become operational.

The individual responsible for internal credit assessments must be appointed by the firm's management body, have access to this management body, have appropriate experience and have distinct responsibility for the function (where this is proportionate).

MA permissions, breaches and consequential rule changes

This part of the PRA's proposals concerns its approach to MA permissions and breaches.

As well as changes to the PRA Rulebook and SS7/18, the proposals include the introduction of a new Statement of Policy (SoP) entitled 'Solvency II Matching Adjustment Permissions,' which sets out the PRA's approach to granting new, and variations to, MA permissions.

The PRA considers the proposal to restate existing regulations into PRA rules would provide consistency with existing provisions that support a robust insurance regulatory regime.

PRUDENT PERSON PRINCIPLE

While all firms are required to comply with the PPP, the links between the PPP requirement and the MA eligibility conditions are not currently explicit. As a result, the PRA is proposing that firms are required to include in their MA applications evidence that the assets they wish to invest in are capable of being managed in line with the PPP, both at the level of the portfolio and individual assets.

The PRA expects firms to provide readily available information that they would have prepared as part of their existing processes to assess whether any new assets they wish to invest in are capable of being managed in line with the PPP. Where this requirement increases a firm's analysis, the PRA views this as addressing shortcomings in its current processes.

As the PPP requirement builds on an existing regulatory requirement and is a requirement to provide evidence rather than to develop new processes, the PRA considers that it does not constrain competition or international competitiveness and growth.

STREAMLINED MATCHING ADJUSTMENT APPLICATION APPROACH

The PRA proposes to introduce a streamlined MA application approach for certain types of applications. Upon a firm's engagement with the PRA, in relation to a proposed MA application, the PRA will indicate whether such an application is likely to be suitable for a streamlined approach.

For all MA applications, the CP proposes in the SoP to reach a decision as quickly as possible, and it expects to provide its decision no later than six months from its receipt of a firm's application. Where applications are assessed under a streamlined approach, the PRA would expect to reach a decision in a shorter timeframe.

Applications reviewed under the streamlined approach would be assessed against the MA eligibility conditions prior to granting permission. The assessment of other factors relating to the ongoing application of the MA (e.g., ratings or valuations) may be deferred until after MA permission has been granted and conducted as part of the PRA's ongoing supervision of the firm.

The PRA expects that the streamlined approach would be suitable where applications are clearly in line with the MA eligibility conditions, propose less complex changes, or where firms propose appropriate safeguards.

It may be possible for the range of assets potentially suitable for a streamlined approach to cover certain more novel assets, including those which have HP, rather than fixed, cash flows. However, this may only be possible if a firm were also to propose safeguards or mitigants for the increased risks. That said, the risks and complexities associated with some assets (e.g., internal securitisations) may mean that it is not possible to apply a streamlined approach, even if safeguards are proposed by the firm.

The PRA considers that the proposed streamlined approach would allow the PRA to focus its resources on the most material risks to the safety and soundness of the firms it regulates, and to continue to secure appropriate protection for policyholders, while enabling firms to make investments in an efficient and timely manner.

The PRA's introduction of a streamlined approach to certain MA applications is likely to be welcome to firms, as current approval processes are viewed by some as onerous and a potential barrier to investment in new asset classes. However, the PRA's criteria for applying the streamlined approach could mean that firms would, in effect, need to take a cautious approach to their choice of investments, their internal ratings methodology and the choice of any FS additions in order to demonstrate that the full approach would be disproportionate.

BREACHES OF MATCHING ADJUSTMENT CONDITIONS

In the event of a breach, the PRA proposes to retain the two-month period provided for firms to restore compliance with MA conditions.

The CP proposes setting an expectation that firms should not breach MA eligibility conditions on a regular or frequent basis.

Where compliance is not restored within the two-month window, the PRA proposes that firms would automatically be required to reduce the amount of MA in a staggered fashion. This reduction would be at least 10% of the unadjusted MA, increasing by an additional 10% for each further month after the two-month window that a firm is not in compliance with MA eligibility conditions.

If the MA has been reduced to zero, the PRA proposes to revoke the permission to apply the MA. However, if the firm were to restore compliance during the period in which the reduction to the MA is in effect but the MA has not yet been reduced to zero, the restriction would be rescinded but the firm would be expected to seek confirmation from the PRA that compliance has been satisfactorily restored before returning to applying the full MA.

That said, if a firm commits a significant breach of MA conditions or repeatedly breaches MA conditions, it is possible that the PRA will consider revoking the firm's permission to apply the MA (even where the MA has not yet been reduced to zero).

If a firm has had its permission revoked, it will be required to submit an application for a permission to apply the MA again. While the PRA has not set a minimum time limit between revocation and reapplication, it would expect that firms reapplying demonstrate that they have addressed the previous issues which led to permission being revoked.

The PRA considers that the proposed changes to the consequences for breaches would reduce the risk of any cliff-edge effects for UK insurance firms, which could threaten their safety and soundness, and would enable them to restore compliance in a more proportionate manner while still bearing adverse consequences for serious or sustained breaches.

DELEGATED AUTHORITY TO SUBMIT MATCHING ADJUSTMENT APPLICATIONS

The PRA considers that the board of a firm may delegate authority for approval and submission of new MA applications and applications to modify the scope of existing MA permissions to a suitable sub-committee of the board or to approved senior managers.

Attestation

As anticipated, the PRA is introducing attestation requirements for the FS and MA, such that:

- The FS calculated by firms reflects compensation for all retained risks.
- The MA can be earned with a high degree of confidence from the assets held in firms' MA portfolios.

The PRA's proposals on the attestation would require a nominated senior management function holder (SMF) at each affected firm to attest to the PRA on the sufficiency of the FS and the quality of the resulting MA generated by the assets in their MA portfolio(s). It is expected that firms would review the size of the FS and MA separately from each other, i.e., not simply attest to the MA as the residual spread having first determined the FS⁷. The proposals would also permit firms to increase the FS, where necessary, to ensure it covers all risks retained by the firm and hence ensure the technical provisions (TPs) remain adequate.

The nominated SMF should have responsibility for the calculation of the FS and hence the ability to increase it if necessary. The PRA recognises that the SMF may have delegated their responsibility for elements of the balance sheet valuation; however, ultimate accountability for the attestation should remain with an individual SMF or SMFs (if the responsibility is shared).

The attestation would use standardised wording (as set out in the PRA Rulebook), and, as well as the attestation itself, a firm would be required to provide a supporting attestation report. It is noted that the PRA does not propose to introduce public disclosure of the attestation material. Furthermore, neither the attestation report nor the underlying evidence is proposed to be within the scope of external audit.

⁷ The rationale for the separate review of the FS and MA in the proposed consultation is due to significant judgement and uncertainty in decomposing the spread into compensation for retained risks (FS) and other factors that are not related to retained risks (MA). For example, this may be required for assets with complex cashflows, such as assets with a construction phase and long duration cashflows, where the assigned credit rating of the asset might not reflect uncertainty and judgement in full. An alternative way to allow for uncertainty and judgement would be through haircuts applied to the asset cashflows which would reduce the size of MA.

The proposals require that firms must put in place and maintain a formal attestation policy. To support this, appropriate internal processes, systems and controls will be needed to allow a firm to analyse and justify its use of the FS and MA in accordance with the attestation.

The PRA expects attestation policies to include the following items:

- How firms have determined the SMF responsible for the attestation
- The triggers that may result in a material change in the risk profile of the firm for an out-of-cycle attestation
- The process by which the attester should review the FS and MA, including any criteria for subjecting assets to a more detailed review
- An approach for determining the amount of any addition to the FS

The PRA requires an attestation for each MA portfolio within a firm, annually, with the effective date aligned to its SFCR, and additionally upon any material change to in the firm's risk profile ('out of cycle' attestation).⁸

The attestation provided must be performed at the MA portfolio level rather than at legal entity or group level. The proposed attestation requirement is for the 'MA to be earned with a high degree of confidence' across different asset types, including those with HP cash flows. The PRA expects firms would target the same level of certainty as they would for a portfolio of liquid corporate bonds with fixed cash flows and up-to-date accurate credit ratings.⁹

The proposed amendments to SS7/18 set out a possible three-step approach that firms could use to systematically review the evidence for the attestation, as follows:

- **Step 1.** Identify assets in the MA portfolio with a risk profile that is consistent with the assumptions underlying the MA (e.g., corporate bonds).
- **Step 2.** Identify assets in the MA portfolio with a risk profile that is not consistent with the assumptions underlying the MA (e.g., assets that are internally rated, internally valued, privately placed, restructured or assets with HP cash flows).
- **Step 3.** Review all assets in the MA portfolio and explain (or modify) the MA on assets that are material contributors to the MA. The PRA expects firms to have in place clear metrics to identify assets with material contribution to the MA.

By requiring each firm to provide an attestation as to the appropriateness of the FS and MA, the PRA is proposing to put the onus on firms to undertake the detailed analysis necessary to validate the size of the MA. This is likely to result in a significant amount of additional quantitative and qualitative analysis and for firms to validate internal ratings and the size of any FS addition. Any additional validation tests established by firms may also need to be passed under stress in firms' SCR calculations, which could add additional complexity to firms' internal models.

There may be an argument that the Effective Value Test, which is the PRA's own validation tool for the MA benefit on lifetime mortgages, could set a benchmark for the PRA's expectations around the level of detail it might expect firms' analysis to go into to attest to the size of the MA for other, similarly complex, asset classes.

Firms are also likely to wish to understand how their approach to determining the appropriateness of the MA benchmarks against comparable approaches in other firms, in order to understand whether their approach and resulting calibration are likely to be outliers relative to the rest of the industry.

⁸ The draft amendments to Supervisory Statement SS 7/18 include the following examples of triggers for an out-of-cycle attestation: a large bulk purchase annuity transaction where the assets transferred have a materially different profile to those currently held, the merger of two MA portfolios, or a significant shift in the economic outlook for assets comprising a material proportion of the MA portfolio.

⁹ The proposed consultation notes in paragraph 6.20 that 'high degree of confidence' would require the MA to be materially more certain than the 50th percentile or best estimate basis, but we note that this requirement is not repeated in the draft amendments to Supervisory Statement 7/18.

Assumptions underlying the MA

When referring to assumptions underlying the MA, the PRA defines two categories of assumptions:

- Conceptual assumptions
- Technical assumptions

Conceptual assumptions are fundamental assumptions which underpin the concept of the MA. There are five conceptual assumptions listed in Supervisory Statement 7/18. A key assumption refers to PRA's expectation that the MA is required to be earned with a high degree of confidence.¹⁰

Technical assumptions are detailed in publications by the PRA for the calculation of the MA itself. There are four technical assumptions listed in Supervisory Statement 7/18, including the assumption that 30% of an asset's value can be recovered on default and that downgraded assets are immediately replaced with an asset of the same asset class, same cash flow profile and the same or higher credit quality.

Firms are required to consider both types of assumptions to determine whether their application of the MA is consistent with these assumptions. The PRA proposes to introduce a specific expectation for firms to consider these assumptions when they consider how they comply with TP requirements, the Investments section of the PRA Rulebook and governance requirements as set out in the PRA Rulebook.

The PRA has noted that requiring firms to set out the assumptions underlying the MA will allow it to identify the risks captured in the PRA's published technical information and identify areas where potential additions may be required to allow for any new risks not being allowed for. The PRA has introduced a requirement that, should a firm determine that its risk profile differs from these conceptual and technical assumptions as set out by the PRA, then the firm would need to take remedial action. Suggestions provided by the PRA include applying an FS addition, removing assets from the MA portfolio, or changing the management and governance of the MA portfolio. The PRA has not changed its policy about the use of capital add-ons for the MA and will consult further on this in due course in its proposed SoP - Solvency II: Capital add-ons.

The PRA believes that the proposals will progress its primary objectives of safety and soundness and policyholder protection, as it promotes increased clarity and transparency. The PRA also believes that defining these two sets of assumptions will improve consistency amongst firms.

Most firms will recognise the assumptions underlying the MA in the current Solvency II framework. Technical assumptions and most conceptual assumptions are similar to assumptions underlying the current calibration of FS, which is currently calibrated based on corporate bond data.

It is widely accepted that some of these assumptions, such as the 30% recovery rate on default and the immediate replacement of downgraded assets, may need to be revisited for asset classes other than corporate bonds. It remains to be seen whether firms will consider adapting some of these assumptions to asset classes in their MA portfolios.

MALIR data collection

The PRA has previously asked firms with MA approval to voluntarily submit data covering the assets and liabilities held in their MA portfolios, and the FS and the MA generated by each asset and asset cash flow. These requests were on an ad-hoc basis and the PRA now proposes to introduce a formal reporting requirement known as the Matching Adjustment Asset and Liability Information Return (MALIR).

The MALIR will consist of annual reporting templates required to be submitted from year-end 2024. Separate MALIR submissions would be required for each MA portfolio with the instructions and definitions relevant to completing the templates being added to the PRA Rulebook.

The MALIR is initially expected to be completed in an Excel template; however, a review will be undertaken to assess whether a different format would be beneficial in the long term.

The data collected by the MALIR is proposed to include the following for each MA portfolio:

- Features of the assets held within the MA portfolio, e.g., sector, country of issue, currency and asset type

¹⁰ Paragraph 1A.3 of Supervisory Statement 7/18 "[...] firms which are suitably cash flow matched in respect of their assets and liabilities and hold assets to maturity are not exposed to certain risks, and therefore those firms may expect to earn, with high degree of confidence, the portion of the credit spread on their assets that represents compensation for risks to which they are not exposed [...]".

- Asset ratings, including indicating whether the asset is internally or externally rated, and if externally rated by which rating agency
- Asset-level metrics e.g., yield, spread, FS and MA benefit generated by each asset
- The asset and liability cash flows of the MA portfolio
- Portfolio level output e.g., total spread, FS allowance and portfolio MA benefit
- Results of the PRA Cashflow Tests 1 – 5 where relevant

The PRA has proposed introducing a waiver for the MALIR for firms where the requirements may be disproportionate to the overall size of the firm or its MA portfolio(s).

It is likely that the introduction of the MALIR will increase the reporting burden for firms initially; however, once the process is implemented it will allow firms to provide information to the regulators in a consistent manner and reduce the need for ad hoc data gathering.

The PRA is, however, planning to review the format in which the data is submitted, which may require further development for firms in the future.

The proposed deadline for submitting the MALIR is 130 days after the financial year-end of the firm. This provides additional time for firms after the rest of their regulatory submission.

Notching

The proposed changes also set out details on the mandatory use of notched ratings when determining the FS. Currently the PRA publishes technical information which is split out into seven Credit Quality Steps (CQS) from CQS 0 to CQS 6.

Currently, all assets mapped to a single CQS would be treated as having the same credit quality, and the proposed notching increases the granularity such that assets within each CQS can be treated differently depending on the notched credit quality. The PRA considers these proposals would:

- Improve the risk sensitivity of assets
- Promote consistency between firms
- Reduce the impact of cliff-edges
- Reduce the incentive to hold assets of the lowest credit quality within a CQS

IMPLEMENTATION OF A NOTCHED FS

The PRA intends to continue to publish the same information as before and proposes that firms use linear interpolation between two consecutive CQS pairs to derive the necessary FS adjustments.

Note that this would only be used for the probability of default (PD) component of the overall FS. For non-PD components of the FS, firms can decide how to allow for differences in credit quality from rating notch. Firms can use an interpolation approach or derive the impact as a balancing item.

Also, this would only apply to assets that are currently mapped to CQS 1 to CQS 5, as CQS 0 will unlikely be rated and there is a lack of data for CQS 6.

For a small number of assets, information on ratings may not be available at the required granularity, or there could be delays in obtaining this information. The PRA proposes that these assets are mapped to the published CQS as before (without interpolation) but that the appropriateness of the resulting FS is explicitly considered as part of the attestation process.

OTHER CONSIDERATIONS AROUND NOTCHING

While modelling the FS and MA under stress in internal models to determine the SCR, firms are expected to use the same level of granularity as is used to determine the TPs.

In practice, however, this may not be possible, and if differences in the level of granularity exist, firms will be expected to justify their decision.

There also may be operational challenges in allowing for notched ratings in the calculation of the SCR, as some firms may need to develop their internal models to allow for notched ratings. If time is needed for firms to enhance their internal models, the PRA proposes firms hold additional capital until models are fully developed.

Firms currently using an internal credit assessment to determine the rating of some assets will also need to make changes to the assessment to reflect the increased granularity as discussed above in 'Credit ratings under the MA' section.

Conclusions

CP19/23 proposes a substantial package of reforms to the MA, the aggregate impact of which is unknown and will take some time to become clear.

However, given the focus of the proposals, it seems unlikely that firms whose MA portfolios consist of relatively vanilla asset categories will see a large change in their available MA benefit as a result of the proposals in CP19/23. By contrast, firms with a more esoteric mix of assets in their MA portfolios may find that a reduced MA benefit is available if significant additions to the FS (either in base or stress) are required to reflect the specific risk profile of their portfolios.

Moreover, while CP19/23 makes it clear that the PRA views the current MA framework as being too rigid in certain areas, the increase in the discretion and flexibility available to firms in those areas (for example, by permitting assets with HP cash flows), while likely to be welcomed by firms, is matched by proposed requirements for firms to provide significant additional analysis to justify and validate the approaches taken in such areas—for example, via the addition of two further matching tests and the requirement to attest to the appropriateness of the FS and MA.

Perhaps the most uncertain consequence of the proposals is whether they will drive changes to investment behaviour by annuity providers, and in particular the extent to which the changes will allow insurers to meet one of the UK government's stated objectives for the reforms—that is, to increase their investment in productive assets that support the UK economy.

How Milliman can help

Milliman consultants have extensive experience with Solvency II and its operation in the UK and are well placed to provide tailored assistance and advice on how these proposals can impact firms, navigate the proposed changes and provide modelling assistance if required.

Milliman is also able to assist in formulating responses to the consultation paper, considering the specific needs of a firm.

Please get in contact with your usual Milliman consultant if you wish to discuss further.



Milliman is among the world's largest providers of actuarial, risk management, and technology solutions. Our consulting and advanced analytics capabilities encompass healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

CONTACT

Claire Booth
claire.booth@milliman.com

Robert Bugg
robert.bugg@milliman.com

Neil Christy
neil.christy@milliman.com

Jessica Crowson
jessica.crowson@milliman.com

Florin Ginghină
florin.ginghina@milliman.com

Dilesh Patel
dilesh.patel@milliman.com

Lyndsay Wrobel
lyndsay.wrobel@milliman.com