Bank of England PRA

Appendix 4: Draft amendments to SS8/18 Solvency II: Internal models – modelling of the matching adjustment

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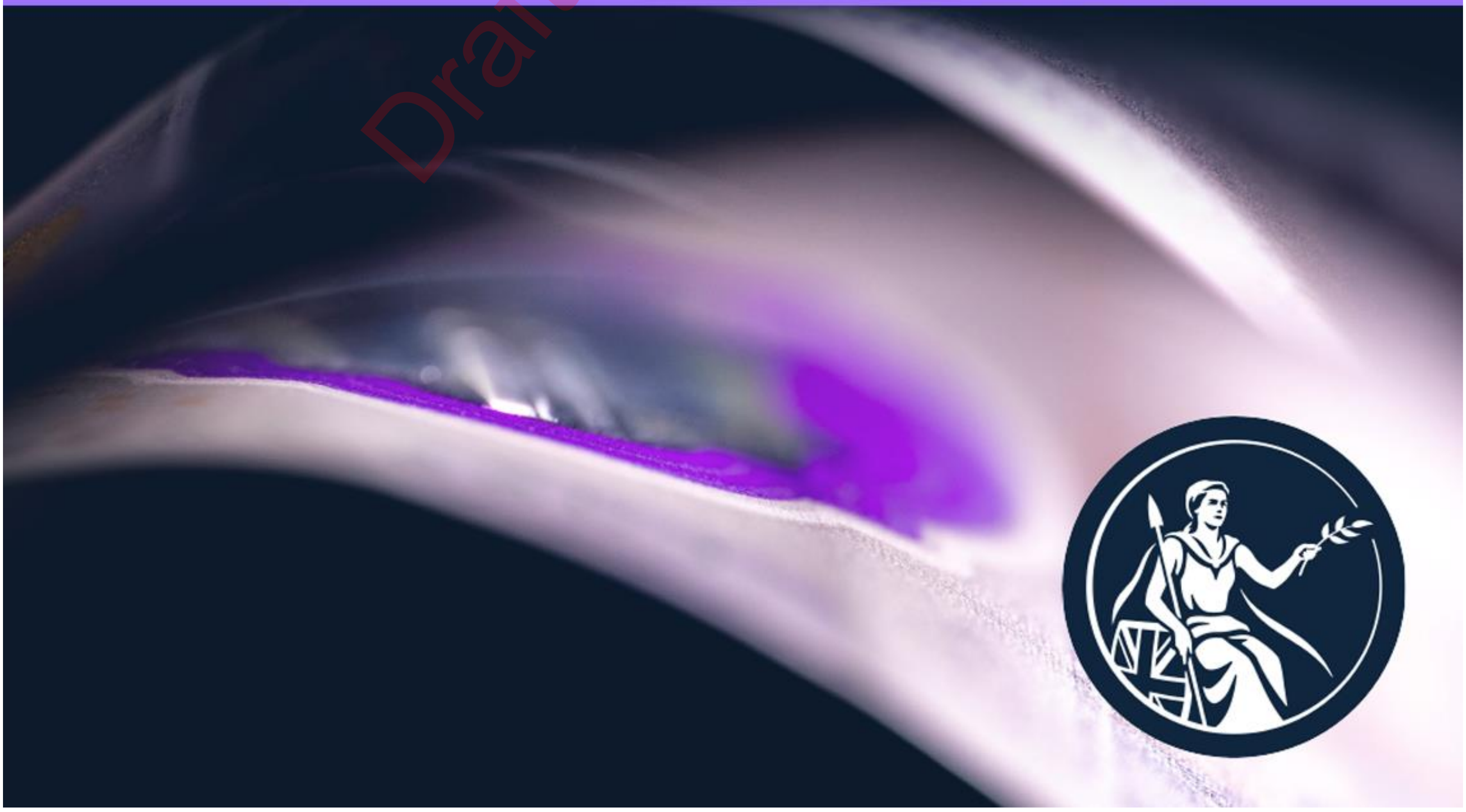

Draft amendments to SS8/18 Solvency II: Internal models – modelling of the matching adjustment

In this appendix, new text is underlined and deleted text is struck through. The text below reflects the version of SS8/18 effective from 13 July 2018.

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1 Introduction

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1.2 The SS is addressed to UK Solvency II firms and to the Society of Lloyd's and its managing agents. It is most relevant to firms with or seeking MA ~~approval~~ permission and which use a full or partial internal model to determine the SCR, together with UK Solvency II firms making an assessment as to the appropriateness of the standard formula for their risk profile.

1.3 This statement should be read in conjunction with the following Parts of the PRA Rulebook:

- ~~Technical Provisions (Chapters 6 and 7)~~ Matching Adjustment;
- Solvency Capital Requirement – General Provisions (Chapter 3);
- Solvency Capital Requirement – Internal Models (Chapters 10 to 16); and
- Investments (~~Chapter~~ Chapters 2 and 3).

1.4 It should also be read in conjunction with the document 'The PRA's approach to insurance supervision'[1], SS7/18[2] and SS1/20.[3]

1.5 The PRA has considered the relevant sections of ~~the Solvency II Directive~~[4] [The Insurance and Reinsurance Undertakings (Prudential Requirements) Regulations 2023] (referred to here as the 'MA regulations'), the PRA Rulebook and the ~~Solvency II~~ Commission Delegated Regulation (EU) 2015/35[5] ~~(Delegated Regulation)~~ when setting the expectations noted in this SS. Throughout this SS, any reference to any provision of direct EU legislation is a reference to it as it forms part of retained EU law.

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1 ~~March 2016~~ July 2023: www.bankofengland.co.uk/prudential-regulation/supervision.
2 [See the proposed update to SS7/18 that is currently undergoing simultaneous consultation; this footnote will be updated to provide a link following the consultation.]
3 [See SS1/20 and the proposed update to it that is currently undergoing simultaneous consultation; this footnote will be updated to provide a link following the consultation.]
4 ~~Directive 2009/138/EC.~~
5 Commission Delegated Regulation (EU) 2015/35.

1.7 The MA allows firms to adjust the relevant risk-free interest rate term structure for the purposes of calculating the best estimate of a portfolio of MA-eligible insurance or reinsurance obligations. In order to calculate the MA for a portfolio, firms must determine the fundamental spread (FS) to be used in the calculation. To apply an MA, firms must have permission from the PRA ~~approval~~, as per ~~Regulation 42~~ [x] of ~~The Solvency 2 Regulations 2015~~ the MA regulations. Firms with MA ~~approval~~ permission are permitted to apply an MA for the purposes of determining both technical provisions (TPs) and the SCR. Firms should have confidence that the level of MA benefit assumed in each of these calculations is fit for purpose. This SS covers the application of an MA as part of the SCR calculation. In general, the references to stressed MA and stressed FS in this SS are intended to apply to the entire MA portfolio on the stressed balance sheet unless otherwise stated.

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2 Allowing for ~~a matching adjustment~~ an MA within the SCR calculation

2.1 ~~The requirements for the calculation of the MA are set out in Technical Provisions 7.2(2),~~ Chapter 4 of the Matching Adjustment Part of the PRA Rulebook, which ~~states~~ restates the relevant provisions of the MA regulations, sets out (at rule 4.6) that ~~'~~the matching adjustment ~~shall~~ must not include the fundamental spread reflecting the risks retained by the firm~~'~~.

2.2 For the purposes of determining TPs, the ~~fundamental spread (FS)~~ FS calibrations used in the MA calculation are, in most cases, provided by ~~EIOPA~~ the PRA in technical information produced in accordance with ~~Technical Provisions 7.3 to 7.5~~ Matching Adjustment 4.10 to 4.15. Where a firm has TPs in a particular currency for which the PRA does not publish technical information, it is the firm's responsibility to propose technical information that complies with Solvency II requirements, and to justify this approach to its supervisor.[6] Firms are required to adjust this technical information (where possible and appropriate) to allow the FS to capture differences in credit quality by rating notch (Matching Adjustment 6). Firms must also, where required, apply additions to the FS for assets with highly predictable (HP) cash flows (as per Matching Adjustment 4.16) and can apply any further additions to the FS that they consider necessary to ensure it covers all risks retained by the firm (as per Matching Adjustment 4.17). ~~However, no~~ No similar technical information is provided in order to calculate the SCR and the PRA expects firms to consider if and how any adjustments to the technical information, and additions to the FS, used to calculate TPs need to be updated in stress conditions.

2.3 A firm's SCR should capture all material and quantifiable risks[7] to which it is exposed. The calculation of the SCR should therefore allow for any changes to the FS and MA following a stress event. In doing this, firms should determine the risks to which the MA portfolio is exposed, how these risks could affect the FS and MA and assess how this impact is captured within the SCR calculation. Changes to the FS in stress conditions should include any changes to additions made to the FS used to calculate the TPs, including those made as part of the attestation process. For assets with HP cash flows, the SCR should specifically allow for changes to the expected cash flow pattern on these assets as well as any changes to any FS additions made in line with Matching Adjustment 8.

2.4 The PRA has identified at least three high-level reasons why the FS could change following a stress:

(i) changes in investment portfolio quality due to the occurrence of a stress;

6 Paragraph 3.6 of statement of policy – The PRA's approach to the publication of Solvency II technical information (August 2022, updating June 2021): www.bankofengland.co.uk/prudential-regulation/publication/2020/the-pras-approach-to-publication-of-sii-technical-information.

7 Solvency Capital Requirement - General Provisions 3.3(1) and Solvency Capital Requirement - Internal Models 11.6.

(ii) assumption changes to reflect an updated forward-looking view of the FS following the stress, including any changes to additions made to the FS (as per Matching Adjustment 4.16 for assets with HP cash flows, or as per Matching Adjustment 4.17 for other reasons) for the purpose of calculating the TPs; and

(iii) assumed management actions, including rebalancing of the MA portfolio, that are required to maintain MA compliance following a stress. The extent of the actions required will be driven by the extent of any mismatch between the asset and liability cash flows following a stress event within the MA portfolio.

2.5 For the purposes of assessing how the assumptions underlying the FS calibration could change post-stress (paragraph 2.4[ii] above), it is important that firms' internal models are not inappropriately constrained by the assumptions and parameters used to calculate TPs. The PRA would therefore not expect firms to adopt a purely 'mechanistic approach' to determine the FS following a stress that directly follows the assumptions and methodology used to determine the FS for the purpose of calculating TPs. The PRA considers that a 'mechanistic approach' based on the re-application of the approach used to calculate TPs is unlikely to result in an SCR that takes into account all quantifiable risks to which a firm is exposed, including the risk of losses that are not allowed for within the TP calculation, resulting in an FS that may not capture all retained risks in stressed conditions. This is particularly the case for assets with HP cash flows where firms should consider changes to both the stressed cash flow projection and the level of uncertainty around this projection.

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2.6A For some assets, particularly those with HP cash flows, the best estimate cash flows could change under stress for reasons other than default. It may not be possible to derive a full probability distribution. However, firms should consider the consequential impacts on the MA benefit and any rebalancing needed to maintain a matched position.

3 A framework for determining the ~~matching adjustment~~ MA used in the SCR calculation

3.1 The PRA has developed a five-step framework that sets out how the MA could be considered in the context of the SCR calculation. The steps in the framework are:

Step 1: re-value the MA portfolio assets under a one-year stress;

Step 2: calculate updated ~~fundamental spread~~ FS values, reflecting the stressed modelled economic environment;

Step 3: verify whether the MA ~~qualifying~~ eligibility conditions are still met (allowing also for any changes in asset and liability cash flows/values);

Step 4: if step 3 has failed, then the cost of re-establishing an MA compliant position should be estimated; and

Step 5: re-calculate the MA. Note that based on the analysis in the previous steps this may need to be based on a re-balanced MA asset portfolio.

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4 Impact of a one-year stress on the ~~matching adjustment~~ MA

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Asset side stress to MA portfolio assets

4.5 The PRA expects firms to determine the change in the MA asset portfolio ~~value~~ over one year. This will include changes in asset values and, for some assets including those with HP cash flows, any changes to the cash flow profile. This is intended to capture only those assets that were already in the MA portfolio pre-stress and not any assets subsequently injected in order to rebalance the portfolio post-stress.

4.6 Any firm that does not explicitly model a change in the value of the assets and, where applicable, a change in asset cash flows is unlikely to be able to demonstrate that it can continue to meet the MA ~~requirements~~ eligibility conditions in stress conditions.~~, and in~~ In particular ~~to determine~~, this includes assessing whether the appropriate level of cash flow matching has been achieved and whether the value of assets in the MA portfolio covers the best estimate value of the MA liabilities.

4.7 The methodology used to calculate the asset values under stress should also determine the credit quality (eg credit rating) of a firm's assets under the modelled stresses at a suitable level of granularity, considering whether it should reflect differences in credit quality by rating notch. This is a key input into the MA in stress calculation.

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Risks retained in stress

4.9 In determining the level of stressed MA, the PRA expects firms to take appropriate account of the risks they retain in stress conditions including:

- downgrade and default risk (discussed below under 'Modelling considerations in respect of downgrade and default risk');
- basis risk; ~~and~~
- concentration risk~~.~~; and
- any additional risks associated with assets with HP cash flows (discussed below under 'Modelling considerations for assets with HP cash flows').

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Basis risk

4.11 Possible sources of basis risk that the PRA expects firms to allow for (unless immaterial) in respect of their MA portfolios include:

- ~~if firms make~~ the use of historical data to inform ~~their~~ a firm's calibrations or assumptions, where the dataset(s) used may not be reflective of the actual holdings and/or risk profile of the MA portfolio. ~~Even~~ A firm should consider whether any basis risk arises from the distribution of the firm's asset holdings by rating notch compared to that assumed in the data and judgements used to calibrate its model. Also, even if historical data does perfectly reflect ~~firms'~~ a firm's asset holdings, the past may not be a good guide to the future and so an element of basis risk should be assumed to be present;[8]
- when firms choose to implement hedging strategies that are imperfect hedges; and

8 It may also be the case that calibrating statistics based on historical data does not fully capture the statistical qualities of the forward-looking distribution.

- if the risk profile of some of ~~the~~ a firm's assets differs materially from the assumptions used by ~~EIOPA~~ the PRA or the firm to calibrate the FS for the purposes of calculating the TPs.

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Concentration risk

4.13 Concentration risk can arise from a firm being disproportionately exposed to, for example, a given issuer or sector. ~~If concentration risk is not captured in the FS used in the calculation of TPs, for example if the FS calibration implicitly assumes the portfolio is well-diversified, then firms may be exposed to additional concentration risk.~~

4.14 In assessing the extent to which a firm is exposed to concentration risks in its MA portfolio, the PRA expects a firm to use a number of different approaches including potentially:

- analysing the composition of its current MA portfolio(s) and the associated investment mandates and policies to identify potential areas of concentration, for example, large single name exposures, sector exposures, exposures to sub-investment grade assets or simply concentration arising from having relatively few different asset holdings comprising the total portfolio;
- including quantitative measurements where possible (eg using the Herfindahl index[9]); and
- conducting stress and/or scenario testing to assess to what degree concentration risk in the MA portfolio could crystallise in a severe credit event, for example increased concentration of exposure to sub-investment grade assets.

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General modelling considerations when determining the FS calibration ~~post stress~~ post-stress

4.18 The PRA does not have a preference or expectation as to the methodological approach used by firms to model the stressed FS, as long as the chosen approach meets the ~~required tests and standards~~ internal model requirements.

4.19 The PRA expects firms to justify the granularity of the underlying modelling performed to determine the stressed FS (eg by asset class, credit quality ~~step (CQS)~~, sector, term).

4.20 As a starting point, the PRA expects firms to consider modelling the FS at the same level of granularity as ~~in the calibration provided by EIOPA~~ is used for the purposes of calculating TPs. However, a different level of granularity can also be justified. This is likely to be particularly pertinent where the firm's MA portfolio includes a material proportion of assets other than corporate bonds or where using the same level of granularity would cause the model to become unduly complex.

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4.21A The PRA expects a firm to justify any differences in the granularity at which credit quality is reflected in its internal model compared to that used for the purposes of calculating TPs. This should include consideration of the following factors:

- the composition of the MA portfolio by rating notch relative to the indices used to calibrate the transition and spread stresses (basis risk). For example, the PRA would expect a firm with a bias or concentration towards the lowest or highest notch in each CQS to make an appropriate allowance for

9 The Herfindahl index is a simple measure of concentration risk, defined as the sum of the squares of the 'market shares' of each asset, where the 'market share' is the ratio of an asset's value to the total asset value in the MA portfolio.

this in its SCR calculation and, all else being equal (including the distribution of assets by CQS), for it to impact the quantification of the firm's SCR;

- the pattern of variation in spread and transition stresses by rating notch;
- the consistency between the granularity at which spreads and transitions are modelled;
- the availability and credibility of relevant data;
- the materiality of the impact of the adjustment to the FS to allow for variation in credit quality by rating notch for the purposes of calculating the TPs (Matching Adjustment 6);
- the consistency with the granularity at which the firm uses the model in accordance with Solvency Capital Requirement - Internal Models 10.3;
- the rebalancing assumptions made within the internal model and the granularity of risk modelling required to support those assumptions; and
- the type of modelling approach used. For example, a model that quantifies the SCR by determining the total stressed FS might reverse out any impacts from notching in the TPs and hence the firm may require a more granular modelling approach to address this.

4.21B A firm may consider that its risk profile requires it to increase the granularity at which credit quality is reflected in its internal model, for example to model the FS by rating notch, but that developing its model may not be straightforward and may take some time. In this circumstance, the PRA expects the firm to consider other possible remedies until it has completed the necessary development, including potentially increasing the capital requirement calculated by the internal model, in order to ensure that the SCR complies with the core calibration standards at all times.[10]

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4.24 Firms may seek to use their models to determine the change in FS in stress conditions or the total FS in stress conditions. While the PRA does not have a preference for either metric, firms are expected to acknowledge, when determining their preferred approach, that these metrics imply two markedly different modelling philosophies that will have a direct impact on the extent to which the SCR behaves in a cyclical manner. The PRA expects firms to understand and justify the approach they have chosen and its limitations. Where a firm has identified scenarios where the approach operates in a way it considers inappropriate (eg produces counter-intuitive results relative to the change in risk profile), the firm should identify the actions it could potentially take in response, for example ~~introducing an overlay using expert judgement~~ increasing the capital requirement calculated by the internal model, in order to ensure that the SCR complies with the core calibration standards at all times.

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Modelling considerations when determining an updated forward-looking view of the FS ~~post stress~~ post-stress

10 Solvency Capital Requirement – General Provisions 3.3 and 3.4.

4.27 Firms may model stressed FS ~~tables~~ by modifying the approach and inputs used to produce the FS ~~tables~~ for determining the TPs. The following paragraphs are of particular relevance for firms using this approach.

4.28 ~~Article 77c of the Solvency II Directive and Article 54 of the Delegated Regulation set out the calculation method for the MA, the assumptions which underpin the MA and the approach which EIOPA should use to derive the technical information used to calculate the MA in accordance with Technical Provisions 7~~ Chapter 4 of the Matching Adjustment Part of the PRA rulebook (restating as rules the relevant provisions of the MA regulations) sets out how the MA and FS should be calculated for the purpose of determining TPs. While the PRA considers that the MA calculation method should not change in stress conditions, ~~the MA assumptions in the Solvency II Directive and Delegated Regulation are specifically set out in the context of the TPs calculation and~~ firms should ~~therefore~~ consider ~~whether they~~ if the assumptions used to calculate the MA and FS for the TP calculation, including any additions to the FS (either for assets with HP cash flows as per Matching Adjustment 4.16 or for other reasons as per Matching Adjustment 4.17), remain appropriate in stress conditions.

4.29 Firms should ensure that the MA on sub-investment grade assets remains appropriate~~. Unless there are strongly justified arguments for moving away from the requirement in Technical Provisions 7.2(3) that (for the purposes of determining TPs)~~ post-stress, taking account of the increased risks associated with such assets and the need to comply with the Prudent Person Principle (PPP) at all times. As a continuation of (or for consistency with) existing modelling approaches, some firms may choose to assume that the MA on sub-investment grade assets does not exceed that on assets of investment grade ~~credit~~ quality of the same duration and asset class~~, then the PRA expects firms to continue to apply this restriction in stress conditions~~. Some firms may instead choose to cap the MA on sub-investment grade assets in a different way in order to reflect the additional risks and PPP implications of sub-investment grade exposures. The PRA considers that such approaches could potentially be a way for firms to demonstrate compliance with the internal model calibration standards. Regardless of the approach taken, firms should ensure that the resulting stresses applied to sub-investment grade assets are appropriately calibrated having regard to:

- the availability of data;
- the extent to which these assets are assumed to default in stress conditions, including the assumptions and judgements about recoveries and the associated workout processes;
- the greater breadth of risks associated with sub-investment grade assets; and
- the potential concentration of risks both pre-stress and post-stress, recognising that over-exposure to speculative investments is unlikely to be compatible with the prudent management of the portfolio as required by the PPP. This presents a risk of forced sales of such assets in stress scenarios in order to ensure continued compliance with risk management requirements, including a firm's own risk limits and investment mandates.

4.30 The PRA expects firms to maintain a floor (ie a minimum level of FS at the appropriate point of the calculation) based on long-term average spreads as part of their modelling of the stressed FS. As a minimum, the PRA expects firms to reapply the methodology and calibration of the floor as set out in ~~Article 77c of the Solvency II Directive~~ Matching Adjustment 4.11 to 4.15. If any changes are made to the floor, the PRA expects these changes to be justified. They should not result in a calibration below that which would have been obtained by re-applying the methodology and calibration used to calculate the TPs.

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4.32 Notwithstanding the above points, the PRA expects the methods used to determine the stressed FS calibrations to be grounded in the requirement that the stressed FS reflects the risks retained by the firm in stress conditions. However, within their internal models, firms may need to develop approaches that use different models and/or assumptions to those used to calibrate the FS for the purposes of determining the TPs calculation, in order for the SCR to take account of all quantifiable risks to which the firm is exposed. Firms are nonetheless expected to ensure that as a starting point they use ~~the EIOPA calibration to determine~~, where available, the FS information published by the PRA, adjusted as required to allow the FS to vary by rating notch[11], for ~~purposes~~ the purpose of calculating TPs.

4.33 Specifically for corporate bonds, firms are expected to ensure that if they are using an approach to model the stressed FS that cannot closely replicate the FS used to calculate the TPs (in basis points or £ millions), consideration should be given to:

- how the FS or MA used to determine the TPs would compare to a proxy calculation based on the firm's own assumptions, and what the key reasons are for any difference; and
- how the firm has chosen to express the stressed FS (ie as the total FS or as the change in FS) and whether the difference between its assumptions at the 50th percentile compared to the ~~EIOPA~~ assumptions used to calculate the TPs could give rise to the SCR being potentially under- or over-stated.

Modelling considerations in respect of downgrade and default risk

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4.35A The PRA expects firms to consider the implications of any difference in granularity between the available historical transition data and the set of assumptions required for modelling, particularly if attempting to model transitions for notched ratings. Even if there is no difference, firms should consider whether low volumes of historical data for some categories of transitions could result in adjustments being required to the data when constructing estimates of future transition probabilities.

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Modelling considerations for assets with HP cash flows

4.40 The PRA considers that a distinction can usefully be drawn between assets with HP cash flows with economic variability and those with event-driven variability. Firms should consider how the cash flows and FS addition will change under stress for both types of assets.

4.41 For assets with economic variability, the cash flow profile under stress should be consistent with the modelled economic conditions. Where any optionality is 'in the money' the projection should reflect the increased likelihood of take-up by a rational counterparty. Firms should also consider the level of uncertainty around the stressed cash flows and the implications this has for any FS addition.

4.42 A lack of reliable data may make it challenging to model the stressed cash flows of assets that are exposed to event-driven variability. The PRA considers that a possible approach is to allow for the increased uncertainty via a change to the FS addition or a cap on the MA. In deciding on an approach, firms should carefully consider:

- the potential for the cash flow profile to change materially;
- any liquidity or reinvestment costs; and
- correlations with the wider economic environment.

11 Matching Adjustment 6.

5 Maintaining compliance with the MA ~~requirements~~ eligibility conditions in stress conditions

5.1 In order to take credit for an MA benefit in stress conditions, firms need to check that their MA portfolio continues to meet the MA ~~requirements.[12]~~ eligibility conditions.[13]

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5.4 Following a stress event, firms may conclude that the result of the assessment referred to above is that the MA ~~qualifying~~ eligibility conditions and/or any internal policies relating to the management of the MA portfolio would no longer be met. Steps 3 and 4 of the five-step framework cover checking and maintaining continued compliance with the MA ~~qualifying criteria~~ eligibility conditions. The remainder of this chapter sets out the PRA's expectations regarding any potential actions that could be assumed to restore compliance with the MA ~~qualifying~~ eligibility conditions and internal policies. The PRA expects firms' assumed actions to be limited to those necessary to restore compliance. They should not include, for example, steps to optimise an already compliant portfolio in a stressed environment.

Re-establishing MA compliance ~~post stress~~ post-stress via rebalancing

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5.9 Following a stress, the PRA expects firms to:

- re-establish cash flow matching in Component A of the MA portfolio[14] as measured using the tests the firm has implemented to assess the adequacy of matching in its MA portfolio. The PRA would also expect firms to have regard to the level of matching measured using appropriate thresholds (eg using the published indicative thresholds for the PRA's ~~3~~ five tests);[15] and
- consider whether additional assets are needed in Component B[16] to ensure that the value of assets equals the value of best estimate liabilities within the MA portfolio and determine any costs of re-establishing MA compliance.

5.10 Any rebalancing action should be consistent with the firm's wider risk management framework and the ~~Prudent Person Principle (PPP)~~ PPP.[17] In particular, firms should consider whether their investment policies (as drafted) may prevent proposed rebalancing actions from being completed in practice.

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5.13 In a situation where the MA portfolio has become mismatched, or is no longer complying with the MA ~~requirements~~ eligibility conditions, firms have a two-month window in which to take actions to restore compliance with the ~~requirements[18]~~ eligibility conditions before their MA will be reduced as per Matching

12 ~~Technical Provisions 6.~~

13 See Chapter 2 of the Matching Adjustment Part, and [x] of the MA regulations.

14 Component A of the MA portfolio refers to the assets ~~whose~~ where ~~cash-flows~~ cash flows replicate the expected liability ~~cash-flows~~ cash flows after being adjusted for the component of the ~~fundamental spread~~ FS that corresponds to the probability of default (taking account of differences in credit quality by rating notch if possible and appropriate to do so).

15 ~~PRA Supervisory Statement 7/18 'Solvency II: Matching adjustment', July 2018: www.bankofengland.co.uk/prudentialregulation/publication/2018/solvency-2-matching-adjustment-ss.~~ [See the proposed update to SS7/18 that is currently undergoing simultaneous consultation; this footnote will be deleted following the consultation as a link will be provided to SS7/18 earlier in this SS.]

16 Component B of the MA portfolio refers to the additional assets that, when added to component A, result in the value of ~~the assigned portfolio (ie components A and B combined)~~ being equal to the best estimate of the liabilities within ~~the~~ an MA portfolio (when discounted at the risk-free rate plus MA).

17 Investments 2 and 3.

18 ~~Technical Provisions 6.4.~~

Adjustment 13.5. It is also possible that in some circumstances the MA could be reduced by more than the amounts set out in Matching Adjustment 13.5 or that a firm's permission to apply the MA could be revoked by the PRA.[19] Firms should consider how this ~~two-month window~~ impacts their investment and rebalancing strategies and their ability to withstand any reduction in MA, including possible reduction of the MA to zero, for any assumed period of non-compliance.

5.14 ~~The requirement to remedy a breach within two-months does not necessarily preclude firms~~ In the event of a breach of the MA eligibility conditions, firms are not necessarily precluded from modelling further rebalancing actions, beyond those required to restore MA compliance ~~that may~~ . However, these actions will need to be able to be taken within the SCR timeframe and be in accordance with firms' own investment strategies and risk limits. Firms will~~, however,~~ also need to demonstrate how any such actions comply with the relevant Solvency II requirements~~. Firms will need to demonstrate that such rebalancing actions~~ and that they are feasible given limited and uncertain timeframes and the potential scarcity of suitable assets and/or competition from other investors. The PRA expects firms to ensure that the calibration and ranking of the ~~'1 in 200'~~ 1-in-200 year stress considers both the quantum of the stress and the window for any rebalancing actions beyond ~~that~~ those needed to restore MA compliance ~~within two months~~. The PRA considers that these factors are likely to set a high bar to firms being able to justify a material benefit from any such additional rebalancing actions.

Injection of eligible assets from elsewhere in the business

5.15 Where a firm assumes that any rebalancing can be done by injecting eligible assets from outside the MA portfolio, the PRA expects the firm to be able to demonstrate that:

- assets held outside the MA portfolio meet the MA eligibility criteria and have the same features as those already in the MA portfolio;
- the appropriate amounts of eligible assets are available outside the MA portfolio;
- the eligible assets outside the MA portfolio are of the appropriate duration and ~~CQS~~ credit quality (in order to meet the ~~cash-flow~~ cash flow matching requirements);
- the assets outside the MA portfolio are not encumbered or required for other purposes (eg to meet margin calls on derivatives held outside the MA portfolio);
- the MA portfolio remains in line with any exposure limits in respect of assets with HP cash flows;
- it has performed a detailed assessment of investment concentration and correlation to ensure that there is not a risk of it assuming it has assets available to inject into the MA portfolio to replace any defaulted assets when in reality the degree of common exposures means that a number of the assets outside the MA portfolio would also have defaulted; and
- it has considered the degree to which its MA portfolio may hold concentrated exposures following actions taken to rebalance the portfolio ~~post stress~~ post-stress, particularly in respect of exposures to sub-investment grade assets, and has reflected this in the SCR.

Asset purchases: availability considerations

5.16 Where a firm assumes that rebalancing involves purchasing ~~of~~ new assets, the PRA expects the following points to be considered and appropriately allowed for in the SCR:

19 [Paragraphs 8.1B and 8.1C of the proposed update to SS7/18 that is currently undergoing simultaneous consultation; this footnote will be updated following the consultation.]

- the availability and liquidity of the assets being sought;
- the likely level of competition for the assets in question. After a systemic market event, it is feasible that there could be a flight to quality in the market and firms should allow for this and the impact it could have on price;
- potential new or increased risks that the assets sought could introduce to the MA portfolio (eg increased concentration of exposures); and
- whether the firm can reasonably expect to do the trading needed in the ~~two-month~~ timeframe ~~available~~ it has assumed to restore compliance with the MA ~~requirements~~ eligibility conditions.

5.17 The PRA expects firms to give careful consideration to the types of assets that could be purchased in stressed conditions, in particular whether less liquid assets or certain assets with HP cash flows could be purchased. In the PRA's view, completing such transactions is likely to be particularly difficult in stress conditions and within the required timescales.

Asset purchases: funding considerations

5.18 Where a firm assumes that rebalancing to remedy a breach ~~within the required two-month window~~ involves purchasing ~~of~~ new assets, the PRA also expects the following points to be taken into account as to how the purchases will be funded:

- where a firm assumes it can use assets outside the MA portfolio to fund such purchases, the expected liquidity of these assets should be assessed in order to determine the feasibility of undertaking this action in practice;
- the PRA would not usually expect firms to assume the replacement assets are purchased using the proceeds from defaulted assets or the sale of assets downgraded below investment grade. This is due to the difficulty in objectively determining prices ~~or recovery rates~~, including prices for assets in default, in a stressed environment ~~and the likely delay in receiving such recoveries (ie there is considerable doubt as to whether the recoveries could be obtained within the two-month timeframe to restore MA compliance);[20]~~;
- where a firm assumes it can sell downgraded assets, it should demonstrate the feasibility of this action, paying particular attention to the reasons for downgrade and justification for any assumptions made in respect of liquidity of the downgraded assets under stressed market conditions;
- the PRA would be unlikely to consider it realistic for purchases to be funded by an assumed sale of less liquid assets; and
- the PRA would expect demonstration of the ability of the firm to sell the assets in question regardless of whether these assets sit in the MA portfolio (ie that they are not otherwise required or encumbered).

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6 Validation of the amount of MA assumed in the SCR calculation

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6.9 Where firms' models to determine the stressed FS are modifications of the approach used by ~~EIOPA~~ the PRA to determine the FS for the purposes of calculating the TPs, the PRA expects the models to be capable of

20 ~~Technical Provisions 6.4.~~

replicating the FS provided by ~~EIOPA~~ the PRA in the same economic conditions. This should act as a check on whether the model is fit for purpose.

…