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BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

Executive Director
Insurance Supervision
Prudential Regulation Authority

28 March 2015

Solvency II: matching adjustment

The PRA has now concluded the pre-application process for the Solvency II matching adjustment (MA). Over twenty firms participated in this exercise and I would like to thank firms for their efforts in completing their submissions. While the pre-application submissions were generally of good quality, the process has also identified some material feedback points which firms will need to act upon quickly ahead of making a formal MA application.

My letter dated 9 March 2015, shared the PRA's initial feedback from the pre-application process in order to assist firms in submitting more robust formal MA approval applications. This letter shares some further feedback in relation to firms' implementation approaches, and the additional justification firms are expected to include in their formal applications.

There are three specific areas in respect of which the PRA is looking for firms that were part of the MA pre-application process to provide further information by 15 April 2015. The detail of what is required is included in the Appendix in the sections on "management of collateral", "treatment of reinsurance" and "cash flow assumptions used for matching analysis".

It was helpful when firms referenced in their submissions whether they have addressed particular issues raised in my previous letters. Firms are encouraged to continue this practice in formal applications.

Executive Director

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Appendix

Management of the MA portfolio(s)

General comments

Firms generally provided insufficient information about how they intend to identify, organise and manage the MA portfolio separately from the other assets and liabilities of the firm in line with Article 77b(1)(b)[1] of the Solvency II Directive.

My letter of 15 October 2014 stated that the exact processes used to identify, organise and manage the MA portfolio separately will vary across firms. As a minimum, the PRA has said that it expects firms to demonstrate that separate processes will be in place relating to:

a. accounting systems;
b. investment policy and mandates;
c. processes and controls, including controls to ensure that assets within the portfolio will not be used to cover losses arising elsewhere;
d. governance; and
e. management information.

While many firms have made progress compared to their trial submissions, work remains to ensure that these processes are adequately developed in time for 1 January 2016 and are documented for the formal application process.

Notional splitting of assets between the MA and non-MA portfolio

Some firms have stated that they intend to split individual derivative contracts notionally between the MA and non-MA portfolios.

The PRA does not consider that such notional splitting of assets is consistent with the requirements of Article 77b(1)(b) of the Solvency II Directive in terms of managing each MA portfolio separately from the rest of the business. If assets were notionally split then to some extent the MA portfolio would be reliant on the rest of the business via the joint management of the assets. Where risk exposures are managed and netted across the MA and non-MA portfolios, this could result in intra-entity exposures emerging. These exposures could in turn lead to MA benefit being lost in the event of counterparty default, if the remaining business did not have sufficient eligible assets to make good any losses in the MA portfolio(s).

It would therefore not be appropriate for firms to manage derivatives forming part of the MA application at a level higher than the level of the MA portfolio. Firms currently notionally splitting their assets will need to split these physically, and put in place systems to allow them to manage exposures at a more granular level.

Management of collateral

Pre-application submissions were largely silent about management of collateral for the MA portfolio.

The PRA does not consider it appropriate for an MA portfolio to post collateral in respect of business other than the insurance business of that MA portfolio, or for collateral received in respect of MA business to be held outside the relevant MA portfolio. The PRA's view is that collateral in respect of an MA portfolio should be managed separately within the MA portfolio. If collateral is managed jointly for MA and non-MA

[1] Article 77b has been transposed principally though regulation 42 of The Solvency 2 Regulations 2015 (2015/575).

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portfolios, then netting of collateral across portfolios would conflict with the requirement to manage the MA portfolio separately.

Pre-application submissions also lacked detail on the type and amount of collateral being posted and/or received for the MA portfolio, and the risks this poses. All firms intending to submit a formal MA application are encouraged to complete the pro-forma in the Annex to this Appendix **by 15 April 2015** and send this to their usual supervisory contact.

Treatment of new business

Firms were not always clear about how they would manage the writing of new business into the MA portfolio to ensure they continue to comply with the MA requirements. Where firms expect to write new business into the MA portfolio, their formal applications will need to describe the processes in place to ensure that:

- the MA portfolio will meet all of the MA criteria at all times. This should include explicit consideration of ongoing asset eligibility (i.e. screening new assets) and cash flow matching (i.e. integrating new assets and liabilities); and

- new business is only included in the MA portfolio, without reference back to the PRA, if the features of the insurance obligations, and the features of the assets matching them, are similar to those for which approval has already been given.

Where new contracts written, or new assets purchased, do not share features similar to the assets or liabilities already within an approved MA portfolio, firms will need to refer back to the PRA for approval before treating them as part of an MA portfolio.

These processes are particularly important where the new business is likely to consist of bulk purchase contracts, as each transaction may result in a significant volume of business being added to the portfolio that could have bespoke features and options.

Diversification between the MA and non-MA portfolios

Internal model firms have generally provided insufficient justification for the assumed diversification between MA and non-MA portfolios. Firms mainly argued for full diversification on the basis that any 'surplus assets' in an MA portfolio are needed to meet the risk margin and capital requirements in relation to that MA portfolio, and that in the biting scenario(s) underlying the firm's capital requirements, there would be a loss in the MA portfolio requiring an injection of assets. Firms then argued that as assets can always be injected into the MA portfolio, there is no loss of diversification.

The PRA considers this analysis to be incomplete. Firms should also consider whether the following could limit the scope for diversification:

- whether sufficient eligible assets exist outside the MA portfolio, or can be sourced quickly, in the circumstances that assets need to be injected into the MA portfolio. If there are insufficient eligible assets available, this could result in the full or partial loss of the MA; and

- whether, in scenarios that generate large surpluses in the MA portfolio, firms are able to extract the MA surplus in time to offset losses elsewhere. If firms cannot extract an MA surplus, the biting capital scenario could change from one that results in large deficits in the MA portfolio to one that results in large surpluses.

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Liquidity plan and wider risk management

General comments

Firms are required to include a liquidity plan within their MA applications, produced as per Article 44(2) of the Solvency II Directive[2]. For the formal application, the majority of firms' liquidity plans will need to be expanded.

While the PRA considers it acceptable for firms to manage liquidity at entity level, firms should clearly demonstrate the processes in place to ensure that there is sufficient liquidity available to the MA portfolio, taking account of any lack of fungibility. Firms should show how the MA portfolio can obtain the necessary liquidity, and how liquidity management for the MA portfolio interacts with liquidity management for the rest of the firm.

It is not for the PRA to prescribe the format of firms' liquidity plans, as these form part of a firm's own risk management. Nevertheless we would observe that:

- plans were often missing actual cash flow forecasts for the MA portfolio and/or did not detail the key assumptions made. Key assumptions could include e.g. reinvestment rates, FX hedging requirements, and use of repos;
- plans did not always clearly outline the tools to monitor and manage liquidity risk, specifically in relation to stress and scenario testing;
- for firms that plan to manage liquidity at entity level, there was often little consideration of the guidance given in my letter of 15 October 2014 regarding the extraction of surplus. The PRA expects firms to reflect this guidance in the liquidity plan; and
- greater consideration should be given to the liquidity of collateral posted to the MA portfolio, including in a stress scenario.

The MA calculation process and results

General comments

On 6 March 2015 EIOPA published the latest set of fundamental spread data. EIOPA will publish updated figures on a monthly basis. Firms should use the most recently published fundamental spread data in their formal applications, and ensure asset cash flows are de-risked in line with the techniques outlined in the EIOPA publication 'Technical document regarding the risk free interest rate term structure', dated 23 February 2015. EIOPA publishes separate fundamental spreads for each maturity of cash flow; firms should pay careful attention to this and ensure they are applying the correct fundamental spread to each of the cash flows of their asset portfolio.

Treatment of reinsurance

My letter of 15 October set out the PRA's expectations for assessing the MA eligibility of reinsurance assets. Having reviewed firms' pre-application submissions, the PRA's view remains that it would be most appropriate for the cash flows from reinsurance assets to be explicitly included within the matching assessment and calculation of MA. This treatment would provide consistency with other asset classes in the MA portfolio, and provides full transparency over the quality of matching and the default risk associated with the reinsurance cash flows.

Given the importance of ensuring an appropriate treatment for reinsurance assets, where firms propose to use a 'net' approach, firms are expected to either set out (by **15 April 2015**) how they plan to map their

[2] This has been transposed in PRA Rulebook: Solvency II Firms Conditions Governing Business 3.1(3).

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reinsurance to EIOPA's fundamental spreads or, alternatively, to explain any concerns or perceived methodological barriers which those firms believe would prevent them from following the PRA's preferred approach.

Asset Eligibility

Internal ratings

As communicated in our 19 December 2014 Directors' letter, the PRA expects firms that currently hold, or who intend to hold, unrated assets within MA portfolios to have in place suitable policies, processes, practices and documentation to demonstrate the appropriateness of their internal ratings.

Firms generally provided insufficient information in this area.

The more comprehensive submissions defined both the process for the assignment of ratings, as well as the periodic review of these ratings. The methodologies, governance and frequency of review for each asset class were also fully set out, along with triggers for ad hoc reviews. The interaction of the internal rating with the fundamental spread was described for each relevant asset class.

The better submissions also defined 'defaults', and set out the process for identifying and managing defaults, on an asset-by-asset basis.

Some responses failed to evidence the independence of the ratings process and the internal approval and reporting lines. Independent oversight of these internal systems, for example by the audit committee, was also not evidenced.

While some reference was made to calibration and back testing, it remained unclear how this was carried out, and how it informed future assignments of internal ratings.

Where firms have internally rated assets within the MA portfolio, the PRA will require proportionate independent assurance, potentially involving third-party review, on the rating process. Supervisory teams aim to discuss with firms how this may be achieved, including the pros and cons of various approaches.

Firms using the standard formula (or considering the use of the standard formula as part of their internal model contingency plans) should pay close attention to the implications for capital requirements of unavailability of external ratings (see for example Articles 4, 6 and 175 – 181 of the EU Solvency II Regulations regarding use of credit assessments).

Use of FX forwards

The PRA's view is that the paired/grouped assets that result from using FX forwards to hedge non-sterling bond exposures do not provide fixed cash flows (as required by Article 77b(1)(h) of the Solvency II Directive) and consequently we cannot currently envisage circumstances in which these assets, in their current form, would meet the eligibility requirements for MA. The cash flows on these paired/grouped assets are only contractually fixed for a few months rather than over the full duration of the underlying bond.

The PRA is not persuaded that the rolling of the forwards on expiry, combined with the purchasing/selling of the underlying bonds (i.e. rebalancing), together produce fixed cash flows over the full duration of the bond. Such an interpretation depends on two significant assumptions: regular rolling and rebalancing of the matching adjustment portfolio; and reliance on the firm's continuing ability over a long time period to access the FX forward markets.

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The PRA considers that relying on these assumptions is not consistent with the Directive requirement for the MA portfolio of assets to have fixed cash flows. The Directive also contemplates that the assigned portfolio of matching assets may change only in limited circumstances which are out of the control of the firm (e.g. on early repayment of an asset within the conditions set out in the last sub-paragraph of Article 77b(1) of the Solvency II Directive, and where expected liability cash flows have materially changed due to, say, changes in underlying longevity assumptions (Article 77b(1)(a))). The PRA considers that these circumstances do not encompass the use of assumed management actions/rebalancing on the potentially significant scale that would be needed to overcome the maturity mismatch between firms' foreign currency bonds and the associated short-term forwards.

The PRA notes that some other strategies to hedge currency exposure, and specifically the use of significantly longer-dated cross currency swaps, would be more consistent with the MA eligibility criteria. Firms currently using FX forwards in their MA portfolio should explore longer-dated cross currency swaps or other approaches including potential portfolio restructures.

Collateral received against stock lending activity

Some firms undertake stock lending activities using assets held in an MA portfolio, and receive collateral against the resulting counterparty exposure. Unless this collateral comprises only MA eligible assets, there is a risk that in the event of a collateral call, the MA portfolio would cease to meet the MA requirements and it may not be possible to rectify this within the required two-month period. The PRA is, therefore, of the view that stock lending can only be undertaken within an MA portfolio if the collateral received satisfies the MA asset eligibility requirements. In their formal applications, firms should also consider how the overall matching position of the MA portfolio could be restored were a call on the collateral to lead to the failure of the matching tests.

Intra-group hedging

The PRA notes that one of the options some firms have considered in order to remove ineligible features from their assets is a derivative contract between the firm which holds the MA portfolio and another part of its insurance group. The PRA does not consider that such an arrangement achieves a sufficient level of transparency around the transfer of the risk. To achieve such transparency, the PRA considers that the derivative contract would need to be transacted with a counterparty outside the insurance group. The PRA considers that the position for internal re-packagings(such as that contemplated by some firms in relation to their portfolios of Equity Release Mortgage receivables) is different because the structure of, and governance around, a special purpose vehicle helps to ensure the interests of the MA portfolio are adequately protected in a more transparent way.

Intra-group loans

The PRA generally has concerns about the appropriateness of including intra-group loans within a MA portfolio. In particular, firms will need to be able to demonstrate to the PRA that they are not used as a means of circumventing asset eligibility requirements for the MA. More generally, the suitability of intra-group loans as assets to back technical provisions would need careful consideration under the prudent person principle.

Assessment of adequacy of make-whole clauses

Analysis of the appropriateness of the reference gilt underlying make-whole clauses was often absent or incomplete. Many firms are proposing maximum make-whole spreads of up to 100bps for their investment grade corporate bonds. Given that the difference between the 5 and 10 year gilt yields is currently 60bps, the nature of the reference gilt is important in ensuring that sufficient compensation would be received on early repayment of an asset.

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Similarly, where firms' make-whole clauses would not be sufficient to replace foregone cash flows using corporate bonds, there was generally insufficient consideration of whether other potentially highly illiquid assets would be available to buy or originate in order to replace the cash flows foregone at the same or a higher credit rating.

Liability eligibility

Identification of options and other features within liability contracts

Firms generally provided insufficient evidence of the process they used to identify the options and other features within their liability contracts. In some cases, it was not clear that all options and other features had been identified and, therefore, whether all liabilities categorised as eligible truly met the relevant requirements. Firms should provide more detail on this in their formal applications.

Cost neutrality of surrenders

There was often insufficient evidence as to how firms had assessed the cost-neutrality of surrender options detailed in Article 77b(1)(g) of the Solvency II Directive. The PRA's preferred approach is for the surrender value to be compared against the best estimate of liabilities (BEL). Where firms have compared against the BEL plus risk margin, firms must clearly demonstrate that the contribution of the MA portfolio to any surrender pay-out would be limited to the amount of assets held in the MA portfolio in respect of the surrendered contract(s). For the avoidance of doubt, the PRA considers that including the contract's contribution to the solvency capital requirement (SCR) in the cost-neutrality assessment would be appropriate only in exceptional circumstances.

Matching

Cash flow assumptions used for matching analysis

Whilst most firms provided the cash flows underlying their assessment of matching, few firms explicitly stated whether these cash flows assumed non-zero reinvestment rates or future management actions.

All firms involved in the pre-application process should clarify this with their usual supervisory contact, **by 15 April 2015**. Firms should include details of any management actions and reinvestment rates assumed, and should describe the treatment of any swaps or other derivative contracts (see section 'Treatment of paired or grouped assets' below for further details).

My letter of 9 March 2015 clarified that the PRA expects this information to be included as part of firms' formal applications.

The published matching tests and indicative thresholds should not be viewed as the only relevant consideration in assessing the level of mismatching risk in the MA portfolio. These tests and thresholds are diagnostic tools, aimed at identifying portfolios that may be exposed to material mismatch risk. Where a firm achieves these thresholds, it will not necessarily follow that the portfolio is sufficiently well matched.

Treatment of paired or grouped assets

Paired or grouped assets will generally consist of an underlying asset (or assets) that on a standalone basis would be ineligible, and one or more hedging assets that when combined with the underlying asset(s) produce eligible features. Some firms were unclear how their hedging assets were treated, either for the matching tests or the calculation of the MA. In their formal applications, firms should explain:

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- how cash flows from the Component A[3] hedging assets are treated in the assessment of matching, particularly in relation to PRA Test 1[4];
- whether the cash flows of the underlying asset(s) in a pairing or grouping have been hedged based on their contractual cash flows or expected cash flows. If the latter, firms should explain what they are taking as 'expected' cash flows; for example, cash flows that have been de-risked for the default component of the fundamental spread; and
- how the paired or grouped assets have been mapped to fundamental spreads, and in particular whether the mapping is done for the combined asset or individually. For example, an FRN/interest rate swap pair could be mapped as one fixed cash flow asset, or the FRN and the swap could be mapped individually, with different fundamental spreads then potentially applying to each part.

[3] Component A was defined in Paul Fisher's letter of 15 October 2014 as "assets whose cash flow replicate the expected liability cash flows after being adjusted for the component of the fundamental spread that corresponds to the probability of default.
[4] PRA Test 1 – "the forced seller of assets test"

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Annex

Pro-forma for management of collateral

Please complete the table below, with a separate table for each of the following bullets:

- Assets held within an MA portfolio being posted or received as collateral in relation to exposures in that MA portfolio
- Assets held within an MA portfolio being posted or received as collateral in relation to exposures outside that MA portfolio
- Assets not held within an MA portfolio being posted or received as collateral in relation to exposures in that MA portfolio

Reason for collateral being posted	Type of collateral	MV of collateral posted	MV of collateral received	Total notional amount of the underlying exposure (if possible)
Derivative Holdings	Gilts			
	Cash			
	Corporate Bonds			
	Other (please specify)			
Stock-lending	Gilts			
	Cash			
	Corporate Bonds			
	Other (please specify)			
Reinsurance	Gilts			
	Cash			
	Corporate Bonds			
Other	Gilts			
	Cash			
	Corporate Bonds			
	Other (please specify)			

Please detail what protection is in place to prevent any collateral posted being transformed into assets which, if returned, would lead to the matching adjustment requirements being breached.

Please also explain how the posting and receipt of collateral could affect your ability to extract surplus from the MA portfolio. In particular, the ability to extract surplus may be limited by any requirements to over-collateralise, or if there are restrictions on the collateral assets that go beyond the MA requirements, such as restrictions on duration, credit quality, asset sector, etc.