

# Bank of England PRA

## New draft supervisory statement – Funded reinsurance

**Supervisory statement**

November 2023

Draft for consultation



Draft for consultation

**Bank of England | Prudential Regulation Authority**

---

# Funded reinsurance

## **Supervisory statement**

**November 2023**

Draft for consultation

# Contents

<b>Contents</b>	<b>1</b>
<b>1: Introduction</b>	<b>2</b>
<b>2: Ongoing risk management</b>	<b>4</b>
Counterparty internal investment limits	4
Collateral policy	6
Recapture plan	7
<b>3: Solvency capital requirement</b>	<b>9</b>
Probability of default	9
Loss given default or downgrade	11
Collateral	12
Recapture within MA portfolio	13
<b>4: Entering into and structuring of funded reinsurance arrangements</b>	<b>15</b>
Risk assessment	15
Basis risks	16
Collateral mismatch risks	17
Time horizon	17
Contractual mitigations	17

Draft for consultation

# 1: Introduction

---

1.1 This supervisory statement (SS) sets out the PRA's expectations in respect of UK Solvency II firms that are life insurers ('firms') entering into or holding funded reinsurance arrangements as cedants. Funded reinsurance is a form of collateralised quota share reinsurance contract which transfers part or all of the asset and liability risks associated with a portfolio of annuities to a counterparty.<sup>1</sup>

1.2 The PRA recognises that reinsurance is an important part of risk management. However, in the context of funded reinsurance, the PRA's concern is that counterparty risks may be underestimated, as a result of the risk profile of the counterparties, the complexities of the arrangements,, and the uncertainty around the effectiveness of management actions in stress.

1.3 The PRA recognises that funded reinsurance arrangements can be used by firms as part of a diversified asset strategy. However, the PRA considers that there are increased risks in connection with funded reinsurance, including from a systematic use of funded reinsurance as an integral part of a firm's business model or from the use of more complex arrangements where it may be more difficult for firms to assess the full extent of risks involved.

1.4 In this SS, the PRA therefore builds on existing requirements and expectations that apply in respect of firms' reinsurance arrangements by setting out additional specific expectations in relation to funded reinsurance arrangements to mitigate the risks arising from these arrangements. For the avoidance of doubt, the expectations in this SS supplement relevant requirements (including under the Solvency 2 framework) and other existing PRA expectations that apply to firms in relation to their outwards reinsurance arrangements, but do not modify or replace any relevant requirement or other existing PRA expectation'.

1.5 To determine whether these expectations are being met, the PRA will seek assurance on firms' practice in a proportionate way, focusing on the exposures that in its view present the greatest risk. The PRA may consider this as a topic in a firms' Periodic Summary Meeting, or where appropriate look to commission a Skilled Persons review. The PRA will continue to monitor how market practice evolves and will keep under review whether there is a need for further specific policy measures. This could include tools to address a potential build-up of sector-wide vulnerability, where these might pose a risk to UK financial stability.

1.6 This statement should be read in conjunction with Chapter 3 of the Conditions Governing Business, Chapters 6 and 7 of the Technical Provisions, the Solvency Capital Requirement -

---

<sup>1</sup> It is often referred to as asset-intensive reinsurance, asset-backed reinsurance, and/or annuity quota share reinsurance.

General Provisions, and the Solvency Capital Requirement - Internal Models Parts of the PRA Rulebook. This statement should also be read in conjunction with SS20/16,<sup>2</sup> SS7/18,<sup>3</sup> SS8/18,<sup>4</sup> and SS1/20.<sup>5</sup>

1.7 This SS expands on the PRA's general approach as set out in its insurance approach document.<sup>6</sup> By clearly and consistently explaining its expectations on firms in relation to funded reinsurance, the PRA seeks to advance its statutory objectives of ensuring the safety and soundness of the firms it regulates and contributing to securing an appropriate degree of protection for policyholders.

1.8 Chapter 2 sets out PRA expectations for ongoing risk management of existing funded reinsurance contracts. Chapter 3 sets out PRA expectations with respect of the calculation of solvency capital requirements for such arrangements. Finally, Chapter 4 sets out PRA expectations relevant to a firm's decision-making process when it comes to entering into and structuring new funded reinsurance arrangements.

Draft for consultation

---

<sup>2</sup> November 2016: [www.bankofengland.co.uk/prudential-regulation/publication/2016/solvency2-reinsurance-counterparty-credit-risk-ss](https://www.bankofengland.co.uk/prudential-regulation/publication/2016/solvency2-reinsurance-counterparty-credit-risk-ss).

<sup>3</sup> July 2018: [www.bankofengland.co.uk/prudential-regulation/publication/2018/solvency-2-matching-adjustment-ss](https://www.bankofengland.co.uk/prudential-regulation/publication/2018/solvency-2-matching-adjustment-ss).

<sup>4</sup> July 2018: <https://www.bankofengland.co.uk/prudential-regulation/publication/2018/solvency-2-internal-models-modelling-of-the-matching-adjustment-ss>.

<sup>5</sup> May 2020: <https://www.bankofengland.co.uk/prudential-regulation/publication/2020/solvency-ii-prudent-person-principle-ss>.

<sup>6</sup> July 2023: <https://www.bankofengland.co.uk/prudential-regulation/publication/pras-approach-to-supervision-of-the-banking-and-insurance-sectors>.

---

## 2: Ongoing risk management

---

2.1 This section sets out PRA expectations in respect of the risk management processes that firms are required to have in place to (among other things) identify, measure, monitor, manage, and report the risks to which they are exposed in relation to their funded reinsurance agreements.<sup>7</sup>

2.2 Given the nature of the risks associated with funded reinsurance, the PRA expects firms' risk management processes to be particularly focused on the whole tail risk to which they are exposed.<sup>8</sup> This reflects the fact that the loss distribution for funded reinsurance is unusually 'fat-tailed', characterised by infrequent but very large losses.

2.3 The PRA expects firms' analysis of the risks arising from their funded reinsurance arrangements to provide sufficient evidence to enable their actuarial function to express an informed opinion on the adequacy of the firm's reinsurance arrangements.<sup>9</sup> The PRA expects this analysis to demonstrate that the firm's business model can survive a single recapture event as well as multiple recapture events involving highly correlated counterparties. For this to be possible, the financial and non-financial impact of recapture should be capable of being reliably estimated including in stress.

### Counterparty internal investment limits

2.4 As part of their investment risk management policy, developed in accordance with Conditions Governing Business 3 and Article 260 of the on-shored Commission Delegated Regulation (CDR), firms' internal investment limits should be designed taking into account the expectations set out in paragraphs 2.5 to 2.12 below.

2.5 For the purposes of developing internal investment limits in relation to funded reinsurance, the PRA expects firms at a minimum to calculate an 'immediate recapture' metric, taking into account the expectations set out in paragraphs 2.6 to 2.11. This metric should measure the impact on the firms' solvency capital requirement (SCR) coverage ratio of an immediate recapture of all business ceded to a counterparty, ignoring the likelihood of such an event. While other metrics might consider potential management actions in accordance with applicable legal requirements, this metric should be calculated before management actions are taken into account to maximise the reliability of the information provided to management. The immediate recapture metric applies only for the purpose of setting internal investment limits (and not for other purposes, including to a firm's recapture

---

<sup>7</sup> In line with PRA Conditions Governing Business 3.1.

<sup>8</sup> In line with PRA Conditions Governing Business 3.1 and 3.2, SS20/16 and SS1/20.

<sup>9</sup> In line with PRA Conditions Governing Business 6.1.

plan or collateral policy). Additional aspects of the use of the 'immediate recapture' metric to set internal investment limits are set out in paragraphs 2.6 to 2.11.

2.6 The PRA expects firms to consider the nature of the collateral that they may inherit in such a recapture event and whether this is sufficient and adequate to cover the technical provisions and risks recaptured. The PRA also expects firms to assume limited to no re-collateralisation of the portfolio by the funded reinsurance counterparty in stress.

2.7 If firms assume recapture within the matching adjustment (MA) portfolio, the PRA expects them to assume a reduced MA spread to take into account prudent rebalancing and trading costs. Where funded reinsurance agreements grant substitution rights to the counterparty, the PRA expects firms to consider the risks that they recapture a 'worst-case' collateral portfolio, that is, a portfolio compliant with their collateral investment guidelines but at the negative end of credit quality and with poorly matched assets. The PRA also expects firms to allow for the increased costs of managing the portfolio post recapture.

2.8 The exposure measurement basis should consider a range of scenarios covering the whole distribution of the risks in the tail. As such, the PRA expects firms' exposure assessment to consider stressed conditions. This includes stresses to the liability cash flows and the value and quality of collateral. In particular, the PRA expects firms to consider the risks beyond the 1-in-200 confidence level over one year, taking for example, a tail value at risk (TVaR) approach.

2.9 The PRA expects firms to set internal investment limits such that a singular idiosyncratic event of a recapture of business from one counterparty does not threaten the firm's business model. The limits should be set to avoid over-exposure in any periods of high SCR coverage ratios which could result in a breach of the exposure limit set by the firm as a result of changing economic conditions. Where a firm's business model is reliant to a material extent on funded reinsurance with one counterparty, the PRA considers that this could present particular challenges with regards to compliance with the prudent person principle (PPP).

2.10 The PRA expects firms to consider broader factors when setting internal investment limits beyond the current credit rating of the counterparties. The PRA expects firms to design appropriate counterparty approval and continuous monitoring processes and to use the output of such processes to inform this limit setting.

2.11 Firms are reminded that in addition to setting internal investment limits to single counterparties, the PRA also expects firms to have additional limits which considers forms of concentration risks.<sup>10</sup> For funded reinsurance, this should include a limit based on the simultaneous recapture from multiple highly correlated counterparties. This should be based on an assessment of similarities in the risk profile of the counterparties operating in the

---

<sup>10</sup> In line with PRA Conditions Governing Business 3.1 and SS1/20



funded reinsurance market. For example, where a firm is exposed to multiple counterparties where credit risk makes up a majority of their post diversification capital requirements ie the firm has an indirect concentrated exposure to credit risks, the PRA expects firms to have an internal exposure limit that considers this concentration risk.

2.12 The PRA also expects firms to set an aggregate limit focused on the firm's own need for a diversified asset strategy as well as operational capabilities on recapture, independent of the counterparties. In setting this limit, the Board should consider the recapture plan set out in paragraph 2.13 and in particular, the ability of the firm to perform the required rebalancing of the asset portfolio, the required hedging activities, and the operational processes associated with the recapture.

## Collateral policy

2.13 The PRA expects firms to have clear collateral policies in place as part of their risk management policies and closely linked to their limit setting process. The PRA expects the collateral policy to allow firms to formulate an executable recapture plan (as further described in paragraph 2.17 below) under stressed conditions. Such a collateral policy should also allow firms to have a reliable estimate of the impact of recapture given the value of, and quality of asset-liability matching of, recaptured collateral; so that the firm can survive the impact of the recapture without threatening the firm's business model.

2.14 The PRA expects a detailed collateral policy for illiquid assets in collateral pools backing funded reinsurance given the increased risk associated with their presence in collateral structures. This should include at a minimum:

- approaches to credit assessment;
- valuation methodology by asset class;
- MA eligibility conditions monitoring;
- SCR modelling of the assets; and
- investment management approach on recapture.

2.15 Firms with MA approval which intend to assume they can recapture collateral assets into their MA portfolio are reminded that they must ensure ongoing compliance of such assets with the MA eligibility conditions as part of their internal risk management policies. Where firms have set out broad contractual definitions of MA eligibility conditions which may not match the firm's own MA approvals, the PRA expects firms to undertake robust testing of samples of assets held in the collateral portfolio to confirm MA eligibility in line with their approvals on a regular basis.

2.16 For the purposes of their collateral management arrangements, the PRA expects firms should also only assess MA eligibility conditions in line with their own permissions, rather than assume that potential future applications for MA approval will be successful.

2.17 Finally, the PRA expects firms to develop supporting analysis to demonstrate clearly that in both base and stressed conditions, the recapture from a counterparty would not result in a breach of the MA conditions (including the matching of cash flows).

## Recapture plan

2.18 The PRA expects firms holding or entering into funded reinsurance arrangements to have a Board-approved recapture plan which at a minimum covers the following:

- approaches to monitoring the financial condition of the counterparty to the funded reinsurance arrangement, and activities carried out if a deterioration is identified;
- a step-by-step process for achieving the recapture of all the assets and liabilities from relevant counterparties, taking into account all applicable laws;
- step-by-step process for asset transfers by asset class, including contract novation (eg derivatives);
- actions to achieve/ensure MA compliance where recapture into the MA portfolio is assumed; and
- areas of uncertainty in the recapture process.

2.19 The PRA expects firms' recapture plans to articulate a clear and structured decision-making process for assessing whether ceded business should be recaptured when optional contractual termination event clauses are triggered. For example, contracts often have solvency-based termination triggers set above a regulatory intervention level which allow for a recapture of the ceded business at the option of the cedant. When the clause is triggered and the option becomes available to the cedant, these can generate complex decisions for management as to whether to recapture early to avoid further deterioration in the quality of the counterparty and collateral, or whether to wait for the counterparty to cure the breach. Both outcomes generate material risks and balance sheet implications for firms.

2.20 To inform their recapture plan and their funded reinsurance internal investment limits, the PRA expects firms to carry out stress testing specific to their funded reinsurance annually in their own risk and solvency assessment (ORSA)<sup>11</sup>. This assessment, which will be relevant to setting internal investment limits for funded reinsurance, should be informed by the

---

<sup>11</sup> In line with PRA Conditions Governing Business 3.8.

---

recapture plan, and quantitatively test, where possible, the outcome of the recapture process, focusing in particular on relevant stressed conditions.

Draft for consultation

## 3: Solvency capital requirement

3.1 This section sets out PRA expectations for firms' assessments of risks associated with funded reinsurance arrangements, with the aim of capturing all material and quantifiable risks in their SCR when taking into account the effects of funded reinsurance as a risk-mitigation technique.

3.2 For firms calculating their SCR on the basis of the standard formula, the PRA reminds firms of the requirement to include in their ORSA a clear assessment<sup>12</sup> of the appropriateness of the standard formula including a consideration of the nature, scale, and complexity of the risks transferred, the risks retained, and the risks to which they are exposed to in respect of funded reinsurance arrangements.

3.3 For firms using internal models or partial internal models to calculate their SCR, the Solvency II Use Test requires the output of such models to play an important role in risk management, decision-making, and capital allocation.<sup>13</sup> The PRA expects firms to undertake robust modelling which takes into account the risks associated with funded reinsurance arrangements and to recognise the importance of the internal models or partial internal models output to the decision making process when it comes to deciding whether to enter into a funded reinsurance arrangement as a risk mitigation technique. Failure to do so may incentivise short-term behaviours not compatible with the long-term sustainability of the business.

3.4 In the context of funded reinsurance, the PRA sets out in paragraphs 3.5 to 3.15 the specific expectations in respect of measuring the counterparty credit risk capital charge in a firm's internal models or partial internal models, with the aim of capturing all material and quantifiable risks<sup>14</sup> and taking into account the effects of funded reinsurance as a risk-mitigation techniques.<sup>15</sup>

### Probability of default

3.5 For probability of default (PD), the PRA's expectations for firms in relation to their funded reinsurance arrangements include the following:

<sup>12</sup> In line with PRA Conditions Governing Business 6.1 and chapter 11 of SS19/16 : 'Solvency II: ORSA', Nov 16: <https://www.bankofengland.co.uk/prudential-regulation/publication/2016/solvency2-orsa>.

<sup>13</sup> In line with SCR - Internal Models 10 and Art 226 onshored CDR 2015/35.

<sup>14</sup> General Provisions 3.3 and Internal Models 11.6.

<sup>15</sup> General Provisions 3.5 and Internal Models 11.8.

- **Adequate data** – Firms should clearly articulate their data choice<sup>16</sup> for assessing the PD of their counterparties. This should include a consideration of whether the counterparties operate in a similar market and whether the business models are adequately reflected in the data.
- **Stressed PD** – The PRA expects firms to calculate a PD both in base and under stressed modelled economic conditions to reflect all material risks<sup>17</sup> including the heightened risk of default in stressed credit conditions.
- **Termination clauses and dispute** – Firms are reminded that they can take full account of risk mitigating effects of reinsurance in their internal models only if the risks of the reinsurance are properly reflected.<sup>18</sup> One aspect of this is the cedant's position not only on the default, insolvency or bankruptcy of the counterparty but also on the occurrence of any other credit event set out in the transaction documentation.<sup>19</sup> The PRA expects that firms' calibration of stressed PD be informed by their internal policy on the actions they would take if certain contractual triggers are breached (referred to in paragraph 2.18).<sup>20</sup>
- **Solvency ratio** – The PRA expects firms to analyse how the solvency ratio of their counterparties changes under various market stresses, and how this could inform their stressed PD.<sup>21</sup> For the purposes of complying with the requirement in Solvency Capital Requirement - Internal Models 14.1(1)(b) in respect of funded reinsurance arrangements, the PRA also expects firms to develop validation processes<sup>22</sup> to specifically explain the sources of any day one new business gain<sup>23</sup> generated by entering a funded reinsurance arrangement.
- **Forward-looking** – Firms should consider whether their historical data captures all risks including forward-looking risks of deterioration of the counterparty conditions.<sup>24</sup> The PRA expects firms to consider how the PD used can be informed by market

<sup>16</sup> In line with Solvency Capital Requirement - Internal Models 11.2(2).

<sup>17</sup> In line with Solvency Capital Requirement - Internal Models 11.6.

<sup>18</sup> In line with Solvency Capital Requirement - Internal Models 11.8 and Article 235 of the onshored CDR

<sup>19</sup> Article 235 of the onshored CDR.

<sup>20</sup> In line with Solvency Capital Requirement - Internal Models 11.3.

<sup>21</sup> In line with Solvency Capital Requirement - Internal Models 14.1(d).

<sup>22</sup> In line with Solvency Capital Requirement - Internal Models 14.1(b).

<sup>23</sup> A new business gain refers to an increase in regulatory surplus (Own Funds less Solvency Capital Requirement (SCR)), which arises when premium paid to the reinsurer is lower than the premium received from the pension scheme, and the counterparty risk exposure does not generate significant SCR. BPA are historically written at new business strain.

<sup>24</sup> In line with Solvency Capital Requirement - Internal Models 11.2(2).

surveillance activities or information implied from market traded instruments such as credit default swaps.

- **Non-public information** – Among other things, firms should consider whether private information gathered as part of their counterparty approval processes set out in paragraph 2.10 would help inform their assessment of PD.<sup>25</sup> For this purpose, the PRA would not expect firms to use this private information to assign a lower PD to their counterparty.

3.6 Where data-driven PD rates are perceived to be insufficient as a result of the analysis set out in paragraph 3.5, the PRA expects firms calculating their SCR using internal models or partial internal models to consider whether the rating of the counterparty needs to be adjusted downwards in their models or whether the data-driven PD needs to be adjusted to reflect the inherent uncertainty.

3.7 The PRA also expects firms to set out and justify their approach to aggregating the capital charges from individual counterparty risks within their internal models or partial internal models, both between counterparties and more generally with other risks, and in particular credit risks.

## Loss given default or downgrade

3.8 For loss given default or downgrade (LGD), the PRA's expectations for firms in relation to their funded reinsurance arrangements includes the following:

- **Stressed liabilities** – Firms should stress the cash flows of the insurance obligations ceded under the reinsurance using the same approaches used in the relevant modules of the internal model or partial internal model. This should include stressing longevity risks and market risks within the liabilities such as inflation and market-sensitive policyholder options.<sup>26</sup>
- **Allowing for credit deterioration of the counterparty** – The PRA expects firms to consider the impact of deterioration in the credit quality of counterparties<sup>27</sup> as part of the stressed counterparty default adjustment (CDA) in the context of their reinsurance recoverables, taking into consideration the lifetime of the reinsurance contract.

<sup>25</sup> In line with Solvency Capital Requirement - Internal Models 11.2(2).

<sup>26</sup> In line with Solvency Capital Requirement - Internal Models 11.6.

<sup>27</sup> In line with Solvency Capital Requirement - Internal Models 11.6.

- **Risk margin on recapture** – The PRA expects firms to consider the impact on the risk margin of the recapture of risks.<sup>28</sup>
- **Management actions** – Firms are reminded that management actions may only be taken into account in a firm's internal model where the requirements in Solvency Capital Requirement - Internal Models 11.8(3) are satisfied, including if they can reasonably be expected to be carried out.<sup>29</sup> If there is insufficient data to demonstrate availability and pricing of certain management actions in a recapture event (for example, the ability to source longevity reinsurance replacement), firms should adopt a prudent approach and not take into account such management actions in their internal models or partial internal models.

3.9 The PRA also expects firms to be able to demonstrate that their internal models or partial internal models capture wrong way risk. This may lead to a close interaction between the stressed PD and stressed LGD for counterparties where credit risk makes up a majority of their post diversification capital requirements or where the counterparty has originated the assets in its collateral portfolio. In such instances, deterioration in wider credit conditions can simultaneously increase PD and LGD.

## Collateral

3.10 For the calculation of the risk mitigating impact of collateral on the firms' SCR calculation as it relates to funded reinsurance arrangements,<sup>30</sup> the PRA's expectations include the following:

- **Look through** – The PRA expects firms to stress the collateral portfolios on a look-through basis to reflect the risks the firm would ultimately be exposed to on recapture. This should include key market risks such as a credit spread stress, credit transition, and other stresses that might affect the underlying portfolio.
- **Collateral mismatch risk** – The PRA expects firms to consider where mismatches may arise between the stressed value of the underlying insurance liabilities that have been ceded and the stressed collateral required under the terms of the funded reinsurance arrangements.
- **Re-collateralisation** – Where large gaps between the required collateral and the available collateral in the collateral portfolio emerge after immediate stresses, the PRA

<sup>28</sup> In line with Solvency Capital Requirement - Internal Models 11.6.

<sup>29</sup> In line with Solvency Capital Requirement - Internal Models 11.8(3)(b) and article 236 of the onshored CDR.

<sup>30</sup> In line with Solvency Capital Requirement - Internal Models 11.8 (2) and article 235 of the onshored CDR.

expects firms to apply prudent assumptions in setting recovery rates to reflect the risk that the counterparty might not be able to replenish the collateral.

3.11 The PRA expects firms to consider the risk that their counterparty to the funded reinsurance arrangement might not be willing or able to replenish the collateral portfolio in certain stressed conditions. This could be as a result of breaching solvency risk appetite, breaching regulatory solvency ratio, regulatory intervention ahead of breaching solvency ratio or competing demands on their resources. The PRA expects firms to be able to demonstrate that their internal models or partial internal models take into account the potential for reduced effectiveness in stressed conditions of the risk-mitigation technique.<sup>31</sup>

## Recapture within MA portfolio

3.12 For firms with MA approval, the PRA considers that there are challenges and material uncertainties as to the ability of firms to recapture the assets and liabilities for the business ceded under a funded reinsurance arrangement into their MA portfolio without breaching MA portfolio compliance requirements. For the purpose of internal models or partial internal models, the PRA therefore expects firms to assume that they recapture the assets and liabilities for the business ceded under a funded reinsurance arrangement outside of the MA portfolio unless they are able to demonstrate clearly that such an inclusion would not result in MA non-compliance in base conditions and in stressed conditions, taking into account future management actions that can be reasonably expected to be carried out.<sup>32</sup> Where firms perform this analysis on the aggregate MA portfolio, the analysis should consider both base conditions and stressed conditions on the whole book post-recapture.

3.13 Where a firm is able to demonstrate MA compliance on recapture in its MA portfolio in line with paragraph 3.12 above, the calculation of the SCR should be based on the spread of the collateral portfolio after the rebalancing necessary to achieve MA compliance. This should consider all material and quantifiable risks and may include but is not limited to:

- the stressed fundamental spread applicable to the collateral portfolio;
- the cost of replacing MA-ineligible assets with alternative, sufficiently liquid, and adequate-quality assets;
- the cost of replacing assets where aggregate internal risk appetite limits for the management of the MA portfolio are reached;

---

<sup>31</sup> In line with article 235 of the onshored CDR.

<sup>32</sup> In line with article 236 of the onshored CDR.



- the cost of setting up a cross-currency hedge programme in stress for currency mismatches in the collateral portfolio;
- Trading activity to achieve internal appetite for the level and nature of cash flow matching on recapture of their collateral portfolio –this should clearly consider stressed trading costs relevant to the collateral asset portfolio; and
- the cost of other hedging after the recapture (including but not limited to foreign exchange, inflation, and interest rates derivatives which may not be recaptured).

3.14 The PRA understands that the collateral guidelines agreed with the counterparty to the funded reinsurance usually define MA eligibility conditions. Due to possible mismatch between the contractual definitions and the firms' actual MA approvals, the PRA considers that there are at least two risks that may arise in such situations relevant to firms that intend to assume recapture in the MA portfolio. The first is that non-MA eligible assets are included within the collateral portfolio by mistake (for example, as a result of the counterparty's controls being inadequate). The PRA expects this risk to be clearly reflected in a firm's internal models through an allowance for mistake, unless the firm has clear and regular monitoring activities to verify the MA eligibility conditions of collateral assets. The second risk is that the collateral portfolio contains assets for which the insurer does not currently have MA approval. In these instances, the PRA expects firms to treat these assets as non-MA eligible in their internal models or partial internal models.

3.15 Firms are reminded that the expectations set out in section 5 of SS8/18, with respect to maintaining compliance with the MA requirements in stress conditions, are relevant in the context of funded reinsurance.

## 4: Entering into and structuring of funded reinsurance arrangements

---

### Risk assessment

4.1 In accordance with the PPP requirements, firms may only invest in assets, the risks of which they are able to identify, measure, monitor, manage, control, report, and take into account in their assessment of own solvency needs in the ORSA.<sup>33</sup> This chapter sets out PRA expectations for the purpose of complying with the PPP requirements when considering whether to enter into, and agree to the terms of, a funded reinsurance arrangement.

4.2 The PRA considers that it would be difficult for a firm to demonstrate compliance with the PPP requirements if its decision for entering into a specific funded reinsurance arrangement did not take into account all of the risks generated by the arrangement as a whole. A firm's reliance solely on internal 'pass-or-fail' criteria, as set out in internally-approved minimum guidelines, for negotiating and agreeing the terms of its funded reinsurance arrangement may be insensitive to the risk-reward trade-off made as part of the structuring process and insufficient to take account of all the risks.

4.3 As part of the assessment of risks, the PRA therefore expects firms to undertake a quantitative assessment to identify and measure the specific risks it might incur when negotiating the funded reinsurance arrangements, for the purpose of their internal limits and risk management processes. This comprehensive risk identification process should then support the structuring process, allowing the implementation of adequate safeguards in the funded reinsurance arrangements to mitigate the risks generated. Of key importance to this assessment are the market risks that firms indirectly expose themselves to when entering funded reinsurance arrangements.

4.4 For such a quantitative assessment, the PRA considers that the following four-step framework may assist firms in considering how this could be carried out. The steps in the framework are:

**Step 1:** Identify all forms of basis risk and collateral mismatch risk that exist within the arrangement (reinsurance contract and collateral agreements).

**Step 2:** Stress the risk factors that would lead to basis risk and collateral mismatch risk identified at the appropriate magnitude and over the appropriate time horizon.

---

<sup>33</sup> Investments 2.1(1).

**Step 3:** Based on the outcome of the quantitative risk assessment, determine whether the new arrangement falls within the firm's approved internal contractual risk appetite set out in paragraph 4.6.

**Step 4:** Where the result is outside of the firm's risk appetite, firms should consider all potential options, including reflecting this by seeking improved contractual protections in the reinsurance contract and collateral agreements.

4.5 The PRA considers that the framework described in paragraph 4.4 could help firms to ensure that their approach to identifying, measuring, monitoring, managing, controlling, and reporting covers all material and quantifiable risks to which they would be exposed if they entered into the funded reinsurance arrangement. The PRA expects firms either to use this framework or satisfy themselves that if they take a different approach, it covers these areas.

4.6 The PRA expects firms to have an approved internal contractual risk appetite statement setting out the maximum acceptable loss at the individual funded reinsurance contract level. Step 3 is to ensure that the proposed new contract is consistent with the risk appetite statement.

## Basis risks

4.7 For the purpose of step 1 in the framework referred to in paragraph 4.4, the PRA expects a firm's identification of risks to include, at a minimum, an assessment of possible gaps between expected reinsurance cover and actual cover, for example, as a result of any of the following, as applicable:

- **Simplifications** – Where the policyholder benefit structure has been simplified in the reinsurance contract for operational reasons or for ease of contract administration, gaps may arise under certain conditions between the reinsurance recoverable and the liabilities. For example, a uniform escalation structure of benefits rather than reflecting the various limited price inflation format may lead to gaps arising under certain inflationary conditions.
- **Modelling** – Where the contract requires a projection of future cash flows under agreed assumptions (for example, longevity improvement rates), differences, or disagreements in views between the cedant and the counterparty can lead to large gaps. This is particularly true with respect to the event risk component of longevity risks.
- **Exclusions** – The contract might exclude certain elements of policyholder benefits or options, for example on spouse eligibility, lump sum, or fixed escalation. These can all lead to complex basis risk, particularly in cross terms such as the interaction of longevity and inflation.

## Collateral mismatch risks

4.8 Similarly, for step 1 of the framework, the PRA expects a firm's assessment of collateral mismatch risks to include the following areas, at a minimum:

- **Simplifications** – Collateral mismatch gaps may arise from the nature of the collateral discounting curve used to determine the required amount.<sup>34</sup> Basis risk can arise where the indices used do not move in line with the required portfolio, or if the deductions for expected losses do not match the fundamental spreads methodology.
- **Underlying collateral behaviour** – Where the collateral portfolio behaves differently from the required collateral amount, there is a risk that large gaps may emerge in stress and the counterparty might be unable to replenish in stress. For example, currency mismatches where the discount curve is stipulated in GBP but the underlying portfolio is mostly non-GBP exposures, large losses may arise in certain stressed conditions.

## Time horizon

4.9 The PRA expects firms to perform such a quantitative assessment set out in steps 1 and 2 in paragraph 4.4 under plausible stress scenarios, both for the full life of the contract and at potential contract termination ahead of contract completion. If the contract terminates early, disputes on long-term longevity improvements assumptions, for example, could result in large gaps.

4.10 For the collateral mismatch risk set out in steps 1 and 2 of paragraph 4.4, gaps can emerge both from how the collateral terms are defined and from the frequency of margining. The look-through stresses applied should reflect how these underlying risks can lead to gaps in the collateral pool which might not be replenished before the counterparty defaults. Where the margining is undertaken only on an infrequent basis (for example, quarterly), the PRA expects firms to consider the risk that large gaps emerge at recapture. Where ad-hoc revaluation options are available, firms should only allow for this if they have clear approved policies on how they would use this power.

## Contractual mitigations

4.11 Contractual protections can be a powerful tool to manage risks and incentivise the right behaviour on the part of the counterparty. The PRA therefore expects firms to have internally approved minimum guidelines on contractual features for funded reinsurance transactions

---

<sup>34</sup> This curve building process involves a bottom-up approach of a swap curve with the addition of option-adjusted spreads of corporate bonds of different ratings and deductions for expected losses and cross currency swaps costs.

which they would apply when deciding whether to enter into a funded reinsurance arrangement. This would include, but is not limited to, the approaches to termination clauses, substitution rights for collateral assets, valuation approaches, concentration limits, and choice of applicable law. This should also cover investment guidelines taking into consideration the PPP<sup>35</sup> and the firm's internal investment strategy. The PRA expects firms to document the rationale for the choice of the minimum guidelines adopted in their policies.

4.12 The PRA also expects firms to use clear risk-based collateral haircuts linked to the risk being addressed, and allow for over-collateralisation in steps 1 and 2 of the assessments set out in paragraph 4.4. The haircut policy should take into account the following expectations as a minimum:

- haircuts should capture and move in line with key risk drivers that are relevant in the transactions. This includes price volatility (if assets are not intended to be, or cannot be, retained) and currency volatility (if the risk is not hedged);
- haircuts should capture other broader risk considerations, where relevant. This includes but is not limited to wrong way risks and cash flow mismatches;
- haircuts should be based on the market risks of the assets defined as eligible under the collateral agreement;
- haircuts should be calibrated at a high confidence level, using a long historical time period that includes at least one stress period; and
- haircuts should be calibrated to incentivise the correct behaviours on the counterparty.

---

<sup>35</sup> Investments Part and SS 1/20.