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Statement of Policy 5/15

The PRA's methodologies for setting Pillar 2 capital

May 2026 (Updating January 2026)

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1 Introduction

1.1 This Statement of Policy sets out the methodologies that the Prudential Regulation Authority (PRA) uses to inform the setting of Pillar 2 capital for all PRA-regulated banks, building societies, designated investment firms and all PRA-approved or PRA-designated holding companies, except for Small Domestic Deposit Takers (SDDTs) and SDDT consolidation entities.[1] SDDTs should refer to the statement of policy (SoP) 5/25 – The PRA's methodologies for setting Pillar 2 capital for Small Domestic Deposit Takers (SDDTs).[2]

1.2 Section I: Pillar 2A methodologies sets out the methodologies the PRA will use to inform the setting of a firm's Pillar 2A capital requirement for credit risk, market risk, operational risk, counterparty credit risk, credit concentration risk, interest rate risk in the non-trading book (hereafter referred to as interest rate risk in the banking book (IRRBB)), pension obligation risk and group risk, including RFB group risk. In addition, Chapter 8B sets out the PRA's methodology to inform the setting of a firm's Pillar 2A lending adjustments.

1.3 Section II: Pillar 2B provides information on the purpose of the PRA buffer, how it is determined and how it relates to the combined buffer. Section II also provides details on the PRA's approach to tackling weak governance and risk management under Pillar 2B and group risk, including RFB group risk.

1.4 Firms are required by the Reporting Pillar 2 part of the PRA Rulebook, or may be asked, to submit data to inform the PRA's approach to setting Pillar 2A capital requirements. Data may be requested on an individual, consolidated and/or sub-consolidated basis as applicable.

1 The full definition of an SDDT and an SDDT consolidation entity, including the SDDT and SDDT consolidation entity criteria, are set out in the SDDT Regime – General Application Part of the PRA Rulebook.

2 https://www.bankofengland.co.uk/prudential-regulation/publication/2026/january/the-pras-methodologies-for-setting-pillar-2-capital-for-sddts.

Section I: Pillar 2A methodologies

2 Credit risk

2.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirements for credit risk.

Definition and scope of application

2.2 Credit risk is the risk of losses arising from a borrower or counterparty failing to meet its obligations as they fall due.

2.3 A firm's Pillar 1 capital requirements for credit risk are determined in accordance with the PRA Rulebook and the Capital Requirements Regulation (CRR). However, the PRA considers that there may be cases where the standardised approach (SA) does not sufficiently capture the idiosyncratic credit risks of a firm. There are also some categories of exposures for which the SA may systematically underestimate the risk (such as for certain exposures to central governments, central banks, regional governments or local authorities, as well as certain unconditionally cancellable commitments assigned to the retail exposure class). The PRA therefore assesses credit risk as part of its Pillar 2 review of firms' capital adequacy.

2.4 The methodologies detailed below are applied to all firms' exposures risk-weighted under the SA, including off-balance sheet exposures and exposures that give rise to counterparty credit risk. Therefore, these methodologies will also be applied to firms with permission to use the internal-ratings based (IRB) approach ('IRB permissions') in respect of portfolios which are risk weighted using the SA. Exposures for which a firm applies the IRB approach are not in scope, regardless of whether a firm is bound by the output floor.

2.5 Where underestimation of Pillar 1 capital is due to deficiencies in IRB models, the PRA addresses the capital shortfall by requiring the firm to remediate the shortcomings of the Pillar 1 models rather than setting Pillar 2A capital requirements.

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Approach to setting Pillar 2A capital requirements for credit risk

2.13B To inform the setting of Pillar 2A capital requirements for credit risk, the PRA considers a firm's own assessment of its idiosyncratic risk in its ICAAP. The PRA also makes use of two systematic methodologies to assess areas where it considers firms' capital requirements are typically underestimated under the Pillar 1 SA. These areas are: (i) certain exposures to central governments, central banks, regional governments or local authorities; and (ii) certain retail exposures which are unconditionally cancellable commitments (UCCs). The add-ons derived from these systematic methodologies (the 'systematic components'), where applicable, constitute the baseline of a firm's Pillar 2A capital requirement for credit risk and cannot be reduced through the outcome of a firm's assessment of idiosyncratic risk.

2.13C Therefore, a firm's Pillar 2A capital requirement for credit risk, where applicable, consists of:

(a) the systematic components; and

(b) any additional capital requirements for idiosyncratic credit risk.

Systematic methodologies for assessing Pillar 2A capital requirements for credit risk

Exposures to central governments, central banks, regional governments or local authorities

2.13D The PRA has set a number of minimum effective risk weights which are applied where the risk weight assigned to an exposure in accordance with the CRR and the Credit Risk: Standardised Approach (CRR) Part of the PRA Rulebook (the 'Pillar 1 RW') is below the applicable minimum effective risk weight. The minimum effective risk weights are applicable to 'exposures to central governments or central banks' and 'exposures to regional government or local authorities' (excluding exposures to the UK government, Bank of England or the UK devolved administrations). However, they are only expected to be binding for some exposures to central governments or central banks which are assigned a credit quality step (CQS) lower than CQS 1 (or minimum export insurance premiums (MEIP) lower than MEIP 1) and for some exposures to regional governments or local authorities. The minimum effective risk weights are also applicable to any part of an exposure subject to the IRB approach where an SA risk weight for a central government, central bank, regional government or local authority is assigned in accordance with the Risk-Weight Substitution Method.

Table A Minimum effective risk weights as a percentage of relevant exposures

	CQS 1 / MEIP 0-1*	CQS 2-3 / MEIP 2-3*	CQS 4-6 / MEIP 4-7* / unrated
Exposures to central governments or central banks (excluding the UK)	No minimum effective risk weight	5%	20%
Exposures to regional governments or local authorities (excluding the UK devolved administrations)	5%	20%	100%

*Minimum effective risk weights for regional governments or local authorities apply on the basis of CQS only. For other requirements on rating, see paragraph 2.13F.

2.13E The difference between an exposure's Pillar 1 RW and the minimum effective risk weight (ie credit risk undercapitalisation) will inform the calculation of the systematic component for exposures to central governments, central banks, regional governments or local authorities. The systematic component is:

The sum of the following calculation for each relevant exposure or part of an exposure:

Exposure value x (Pillar 2A minimum effective risk weight - Pillar 1 RW) x 8%

where:

- '**Pillar 1 RW**' is the risk weight assigned to the exposure in accordance with the CRR and the Credit Risk: Standardised Approach (CRR) Part of the PRA Rulebook

2.13F The PRA requires firms to provide exposure data through submitting FSA076, using the CQS that would have been assigned in accordance with the Credit Risk: Standardised Approach (CRR) Part of the PRA Rulebook to determine the risk weight treatment, had CRR Articles 114(7) and 115(4) been disapplied. For exposures to regional governments or local authorities, the CQS corresponding to the credit assessment of the regional government or local authority must be used unless none is available (in which case the credit assessment of the central government must be used, if available), and the minimum effective risk weight for regional government or local authority exposures will apply irrespective of whether the exposure is treated as an exposure to a central government in accordance with CRR Article 115(4).

2.13G The PRA will apply the Pillar 2A minimum effective risk weight to the protected part of an exposure where the Risk-Weight Substitution Method has been used, and when credit protection is provided by a central government or central bank. The protected part of the exposure will receive an effective risk weight that is the higher of the risk weight of the protection provider as calculated under the SA and the Pillar 2A minimum effective risk weight for the protection provider.

Retail exposures which are UCCs

2.13H A Pillar 2A conversion factor (CF) is applied to firms' retail UCC exposures (excluding exposures to SMEs) to inform the calculation of the systematic component for retail UCCs. The systematic component is:

The sum of the following calculation for each relevant exposure:

Nominal exposure value x (Pillar 2A CF - 10%) x Risk weight x 8%

where:

- '**Nominal exposure value**' is the nominal value of an exposure after the application of specific credit risk adjustments where relevant (in accordance with Article 110 of the Credit Risk: General Provisions (CRR) Part and Commission Delegated Regulation (EU) No 183/2014)

- '**Risk weight**' is the risk weight assigned to the exposure in accordance with Article 123 of the Credit Risk: Standardised Approach (CRR) Part of the PRA Rulebook

- '**Pillar 2A CF**' is either:

- 20%; or
- where the firm has chosen to provide a CF which the PRA considers to be robustly substantiated based on the realised CF(s) for the portfolio, the higher of:
  - the CF provided by the firm; and
  - the Pillar 1 CF of 10%.

2.13I For the purpose of the calculation of the systematic component, the PRA will only consider a CF provided by the firm to be robustly substantiated if the firm has provided realised CFs from historical exposures as evidence and this evidence covers a representative mix of good and bad economic periods. Where firms do not have data over any downturn period, good year CFs are expected to be suitably increased, reflecting an estimation of portfolio behaviour in a downturn event.

Approach to assessing idiosyncratic credit risk

2.13J In addition to the systematic components outlined above, the PRA may also set Pillar 2A capital requirements to reflect a firm's idiosyncratic credit risk. This is the additional capital required for credit risk in excess of the loss absorbing capacity of Pillar 1 and the Pillar 2A systematic components, due to the idiosyncratic credit risks from a firm's bespoke or non-standard lending.

2.13K To inform the setting of Pillar 2A capital requirements for idiosyncratic credit risk, the PRA considers a firm's own assessment of its risk profile in its ICAAP. Firms are responsible for assessing and setting out the idiosyncratic credit risks they face within their ICAAP. However, the PRA considers that certain types of bespoke or non-standard lending may be more likely to have idiosyncratic credit risk that is not fully captured by Pillar 1 capital requirements, and where relevant, the Pillar 2A systematic methodologies. The PRA has set out examples of these types of lending in paragraph 2.6ZA2 of SS31/15.

2.13L Where a firm's detailed assessment concludes that it is holding more capital in Pillar 1 for certain asset classes than is proportionate to their credit risk, the PRA may consider this when setting a firm's Pillar 2A credit risk add-on. However, the PRA does not consider standard lending portfolios to be overcapitalised in Pillar 1. As such, the PRA would only take overcapitalisation into account when setting the overall Pillar 2A credit risk add-on where a firm has provided robust and compelling evidence that the unique characteristics of the exposures in question mean that the PRA's Pillar 1 rules are delivering a level of capitalisation that is materially higher than the underlying credit risk.

Reporting

2.14 Rules 2.7 and 2.7A of the Reporting Pillar 2 Part of the PRA Rulebook set out that firms must complete the data item FSA076 where they have relevant exposures that are assigned a risk weight in accordance with the credit risk SA. These are exposures to central governments or central banks that are assigned a risk weight in accordance with CRR Article 114(7); exposures to regional governments or local authorities that are assigned a risk weight in accordance with CRR Article 115(4); and off-balance sheet items that are assigned to the retail exposure class, and are not

exposures to SMEs, and are subject to a CF of 10% in accordance with Table A1 of Article 111 of the Credit Risk: Standardised Approach (CRR) Part.

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3 Market risk

3.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirement for market risk.

Definition and scope of application

3.2 Market risk is the risk of losses resulting from adverse changes in the value of positions arising from movements in market prices across commodity, credit, equity, FX and interest rates risk factors.

3.3 The Pillar 2A approach to market risk applies to all firms and covers all positions in the trading and fair value through other comprehensive income (FVOCI) books, including loan underwriting commitments, securitisation instruments/positions and covered bonds booked in the trading and FVOCI books.

3.4 The PRA's review of a firm's risks and risk management standards applies equally to positions covered by approved models or standardised approaches and, as such, is relevant to firms both with and without advanced model approval. In practice, however, the PRA expects the Pillar 2A regime for market risk to affect mainly firms with material trading books.

3.5 Where the underestimation of Pillar 1 capital is due to deficiencies of advanced models, the PRA addresses the capital shortfall by requiring the firm to remediate the shortcomings of the Pillar 1 model rather than setting Pillar 2A capital requirements.

Methodology for assessing Pillar 2A capital requirements for market risk

3.6 The market risk rules[3] set out the methodologies that firms must apply when calculating capital requirements for market risk under Pillar 1. The PRA may require firms to hold additional capital under Pillar 2A to cover risks likely to be underestimated or not covered under Pillar 1. The majority of such risks relate to illiquid, one-way and concentrated positions (referred to collectively as illiquid risks), which may not be capitalised appropriately. Other risks include gap risk,[4] intraday risks, market risks on fair-valued positions for which there is no market risk Pillar 1 capital (except where captured by IRRBB) and more generally, risks that may not be well captured under Pillar 1 risk measures (including any material risks not adequately captured under standardised approaches).

Illiquid risks

3.7 To inform the setting of Pillar 2A capital, the PRA relies on a firm's own methodologies for assessing illiquid and concentrated positions. This is because market risk is specific to firms'

[3] As defined in the Required Level of Own Funds (CRR) Part of the PRA Rulebook, the 'market risk rules' means the: Market Risk: General Provisions (CRR) Part; Market Risk: Simplified Standardised Approach (CRR) Part; Market Risk: Advanced Standardised Approach (CRR) Part; and Market Risk: Internal Model Approach (CRR) Part.

[4] 'Gap risk' refers to market risk that is contingent on a significant move in the markets over a short period of time; this can lead to significant losses for structured transaction types where hedges cannot be fully rebalanced.

individual positions. The PRA's focus is on the quality of firms' methodologies, including the magnitude of market shocks applied to assess illiquidity risks.

3.8 When assessing firms' own calculations, the PRA will:

- review the adequacy of the methods used for the identification of illiquid risks by the firm to evaluate the completeness of risk capture;
- assess whether the stresses designed and calibrated by the firm are appropriate to measure the risk to an appropriate level of severity (and, if not, request the firm to apply alternative stresses);
- assess the suitability of any existing capital mitigants or reserves which are proposed to offset the calculated stressed losses and discount these where not relevant; and
- set a Pillar 2A capital add-on such that the sum of the Pillar 1 (including any relevant adjustments, such as for risks not in models) and the Pillar 2A capital requirement is sufficient to cover losses in line with the PRA's target overall capital standard (99.9% over a 1-year horizon).

3.8A Firms are expected to have a comprehensive process, with adequate governance, for identifying illiquid risks. The PRA's assessment of the completeness of risk capture will in part be informed by the rigour of this process and its frequency. Examples of good practice include: the periodic reconciliation of illiquid risks against other relevant internal sources of information (eg level 3 assets, valuation adjustments, positions subject to collateral disputes); the involvement of and senior representative sign-off from market risk managers, product control and other relevant business areas; and the integration of the outputs in regular management reports.

3.8B When assessing the methodologies developed by firms to stress illiquid positions, the PRA will seek to gain assurance that the assumed liquidity horizons are sufficiently prudent, and that the nature of the scenario and the size of the market risk factor shocks are commensurate with the PRA's target overall capital standard. The PRA will assess the extent to which the proposed calculation methods adequately capture material non-linearity, eg for options positions. Where possible the PRA will benchmark firms' methods against the realised shocks from relevant stress periods (eg the global financial crisis). Consideration will be given as to whether an instantaneous market shock is the most plausible way in which a firm could make losses, or whether more extreme losses could be sustained over an extended period (eg through periodic re-hedging activities in a one-way market).

3.8C When considering the suitability of any proposed capital mitigants or reserves, the PRA will assess: (i) the extent to which the proposed Pillar 1 capital requirements offset can clearly be attributed to the positions in scope of the Pillar 2A add-on; and (ii) the extent to which valuation reserves would reasonably be expected to be released as a consequence of the proposed stress scenario. Given difficulties in attributing capital requirements derived from portfolio risk measures such as value-at-risk (VaR), the PRA will consider Pillar 2A capitalisation approaches which more directly quantify the incremental risks. For example, such an approach could involve calculating total losses over an extended liquidity horizon using a suitably calibrated stress scenario, and then subtracting losses from the liquidity horizon covered by Pillar 1 calculations.

3.8D For the purpose of directly calculating the incremental Pillar 2A add-on required, the PRA will benchmark to a method based on a standard 'square-root-of-time' scaling approach to convert overall stress shifts to stress shifts for the Pillar 1 liquidity horizons. For example, if a stress shift of

20% is applied to a position with horizon 60 days (ie 3 months), and the Pillar 1 horizon is 10 days, then the effective Pillar 1 stress shift would be calculated as 8.2% (equal to $\sqrt{10/60} \times 20\%$).

3.8E Where a position is sensitive to risk factors of more than one type for which different Pillar 1 liquidity horizons are defined, firms should provide details of the approach to recognising Pillar 1 offsets. For example, firms could determine a single weighted average Pillar 1 liquidity horizon for illiquid positions using weights determined from the ratio of the marginal contribution of each risk factor to the overall stress loss, eg using a 1st-order approximation:

$$Weight(RF_i) = \frac{|Sens(RF_i) * Shift(RF_i)|}{\sum_j |Sens(RF_j) * Shift(RF_j)|} C$$

3.8F For the purposes of aggregation, the PRA will generally add the stress results from different illiquid risks on a gross basis when determining the total Pillar 2A add-on. However, risks which can be demonstrated to be strongly related may be assessed together. Furthermore, the PRA will not in general require Pillar 2A add-ons to be applied to less material risks. Therefore, the use of appropriately sized thresholds to determine which risks need to be included is considered reasonable (subject to below-threshold risks continuing to be re-assessed on an ongoing basis). In its review, the PRA will assess both the size of any such thresholds, as well as the extent to which similar risks have either been sub-divided (eg to keep below threshold) or aggregated.

Other risks

3.9 In addition to the Pillar 2A add-ons for illiquid, concentrated and one-way positions, the PRA may also request a firm to hold additional capital under Pillar 2A for other market risks which the PRA has assessed not to be sufficiently captured through Pillar 1. Examples of such risks may include, but are not limited to, gap risk, intraday risks, non-interest rate market risks on fair-valued positions in available-for-sale books, and, more generally, risks that may not be well captured under Pillar 1 risk measures (including any material risks not adequately captured under standardised approaches).

3.9A For all such risks identified, the PRA will seek to ensure that, where material, these are included in Pillar 2A through the use of prudent methodologies designed to measure risk to an appropriate level of severity, in line with the PRA's target overall capital standard, over a period commensurate with the liquidity of the positions/risks. The PRA will aggregate the add-ons on a gross basis across different risk types in its assessment and allowance will be given for any relevant Pillar 1 mitigants (following the approach outlined in 3.10).

Syndicated leveraged loan underwriting

3.9B One particularly material type of risk that is not, in general, well captured in Pillar 1 is syndicated loan underwriting, particularly for leveraged loans. Under normal market conditions, a firm's underwriting commitments can be either fully or substantively met through syndication of the loan to other investors before the loan is drawn. However, should the syndication process fail (eg due to market stress) then significant fair-valued losses may be realised on the available-for-sale portion of the loan. For firms with material syndicated loan 'pipelines' (ie committed deals in the process of being syndicated, including signed but not countersigned positions), the PRA will assess the size of the required Pillar 2A add-on by comparison of the firm's proposal with the results of a benchmark model developed by the PRA.

3.9C The PRA's methodology adopts a stress testing approach, where stressed price shocks are applied to the syndicated loan pipeline positions. Calibration of the shocks is based on data from the global financial crisis, and uses the worst 6-month price declines of a set of loan indices, by credit rating:

Rating	Price Stress
A	10%
BBB	20%
BB	27.5%
B	35%
CCC	45%

3.9D These stresses are applied to the notional values of each individual loan commitment in the pipeline. Applying the shocks to the notional values implicitly assumes that the loans are trading close to par prior to the stress.

3.9E The often-drawn-out nature of the underwriting and syndication process means that it may not always be clear at what stage in the process a commitment needs to be included in the stress. The PRA expects positions for which firms have signed the loan documentation to be included, even where these have not yet been countersigned by the client. Further, to the extent that a firm considers itself 'on-risk' at an earlier stage in the process, the PRA would also expect these positions to be included.

3.9F The calculation generates the gross stress loss, to which various mitigating factors are applied:

- **Deal break:** Data from the global financial crisis indicates that around 20%-25% of deals did not proceed. The client may choose not to complete on the loan commitment as the funds are no longer required; a typical reason being that the underlying M&A deal for which the loan was originally needed falls through. Given this, the PRA generally applies a deal-break multiplier to the gross stress losses. However, the PRA expects firms to provide justification for the size of this in relation to the composition of their loan pipeline (eg M&A versus re-financing).
- **Fees & Flex:** The loan agreements typically include contractual fees and a degree of pricing flex. These are both available to reduce losses in the event that the syndication process does not proceed as expected. The PRA allows these to offset the gross stress loss.
- **Hedging:** Firms may choose to hedge the risks in their pipeline, for example through buying index CDS, index CDS options, or equity options. Typically these are macro-hedges and do not offer protection on the specific loans in the commitment pipeline. Where this is the case, and to allow for basis risk between the hedges and the specific names, the PRA assumes only a partial hedging benefit.
- **Pillar 1 capital:** The Pillar 2A add-on is net of any credit risk Pillar 1 capital held against the commitments. The PRA does not take account of any market risk capital associated with hedging activity that the firm may have undertaken.
- **Scale to peak:** The commitment pipeline is typically very 'lumpy' with significant single-name concentration and can show large variation over time driven by deal flow. The PRA's Pillar 2 approach aims to take account of this variation by considering the exposure during the course of the whole year, not only at the ICAAP reporting date. Relevant reference points include the peak exposure, the average exposure, as well as the period-end exposure. The PRA's benchmark is

based on the average exposure over the previous year to the ICAAP date. However, the PRA also gives consideration to whether this should be increased, for example if recent trends or future expectations of the size of the pipeline indicate an increased risk appetite. The PRA's broad principle is to prudently capitalise to a level that roughly captures the long-run, underlying risk of the business, taking account of any growth in risk appetite.

Reporting

3.10 To support the PRA's assessment of market risk Pillar 2A capital requirements, firms are requested to provide at a minimum the information set out below alongside their ICAAP submission, with data as at their ICAAP reference date:

- For illiquid, concentrated and one-way positions:

  (i) Details of the process followed to identify all illiquid, concentrated, and one-way positions or other Pillar 2A risks (including any legacy/non-core positions) and to evidence that complete and comprehensive coverage is achieved;

  (ii) Illiquid and concentrated position spreadsheet (FSA080 Pillar 2 Market risk). The submission should provide details of the methodologies (eg risk factor shocks by tenor, liquidity horizons, and historical calibration period) used to quantify risks of illiquid, concentrated and one-way positions, and any other positions for which Pillar 1 capital charges are judged to be insufficient;

  (iii) Where there is a material difference for a particular stress loss through time (eg versus previous ICAAP submissions), provide narrative explaining the drivers of the change;

  (iv) Detailed breakdown by product type of fair-valued Level 3 assets, including valuations. Provide a quantification of the risk associated with these Level 3 positions if not provided in FSA080 and the reason why they have been excluded;

  (v) A list of all concentration risk AVAs and fair value concentration reserves, mapped to the identified illiquid and concentrated risks used for Pillar 2A;

  (vi) Internal market risk reports (including stress test reports) for the legal entities as of ICAAP date; and

  (vii) Detailed rationale of any mitigants being used (eg 10-day stress loss, capital mitigants) to offset the proposed Pillar 2A stress losses. These should where necessary reflect the Pillar 1 liquidity horizons (LHs) set out in the IMA section. This should clearly set out the LHs being used and the way in which a Pillar 1 offset has been calculated (for example, by offsetting the first n days of the N-day stress loss, where n is the assumed LH).

- For syndicated loans (if relevant):

  (i) Detailed breakdown of syndicated loan positions in the non-trading book, covering all positions where the firm has made a commitment to the client irrespective of whether or not the client has accepted the commitment (ie signed but not countersigned positions), and also differentiating between commitments for which the syndication has not yet started and commitments where the syndication process is underway;

  (ii) Information at each individual position level showing (at a minimum):

- Notional;
- Rating;
- Region;
- Sector;
- CR01;
- Maturity of the underlying loan;
- Duration of the underlying loan;
- Fees and flex; and
- Status (ie stuck, signed and countersigned, signed but not countersigned, other committed trades). Markdowns taken on 'stuck' positions should be included.

(iii) Quantification of the risk arising from the syndication pipeline and the adequacy of Pillar 1 capital requirements or other mitigants relating to these positions to cover this risk. The quantification may, for example, be based on a stress test; in which case, details of and justification for the shocks applied should be provided; and

(iv) Information on the extent to which the loan balances and risk levels have varied across the year and how the capital assessment ensures that the risk is prudently capitalised over time.

3.11 Although the Pillar 2A capital requirement is mainly based on positions held as at the date specified above, in cases where positions relate to portfolios that are concentrated in a small number of underlying names and/or show variability over time (for example, syndicated loans and deal contingent trades), information on this variation and a description of how the firm's capital assessment leads to the risk being prudently capitalised over time should be included.

4 Operational risk

4.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirement for operational risk.

4.2 [Deleted]

4.3 [Deleted]

Definition and scope of application

4.4 Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes legal risk.

4.4A Firms' Pillar 1 capital requirements for operational risk are determined in accordance with the Operational Risk Part of the PRA Rulebook. The PRA assesses operational risk as part of Pillar 2A to ensure that idiosyncratic risks that are not well captured in Pillar 1 are considered, including a firm's past operational risk losses. This ensures operational risk capital requirements are adequate given the risks firms face, whilst remaining flexible and risk sensitive.

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Methodology for assessing Pillar 2A capital requirements for operational risk for all firms

4.9A In assessing Pillar 2A operational risk capital requirements, the PRA reviews a firm's operational risk assessments in its ICAAP in a proportionate manner depending on the size, complexity and systemic relevance of the firms. The PRA considers the following factors:

(i) the firm's business model and exposure to operational risk – including the firm's management of operational risk, the effectiveness and suitability of mitigating actions in place, any relevant external factors that might impact the firm's exposure to operational risk;

(ii) the firm's analysis in its ICAAP, with a focus on historical losses (when available) and the design and severity of the scenario analysis (in line with the expectations set out in 2.18A to 2.18D in SS31/15);

(iii) quality of the firm's own Pillar 2A assessment, including appropriateness and robustness of the analysis and the data used, the strength of the firm's evidence, and the rigour of its methodologies;

(iv) any insights gathered through engagement with the firm; and

(v) peer group comparison.[5]

Further factors the PRA considers for significant firms

4.9B Significant firm means a deposit-taker or PRA-designated investment firm whose size, interconnectedness, complexity and business type give it the capacity to cause very significant disruption to the UK financial system (and through that to economic activity more widely) by failing or by carrying on its business in an unsafe manner.[6]

4.9C Where a significant firm's operational risk measurement framework aligns with the good practices (set out in 2.18F to 2.18P of the SS31/15), the PRA will place greater emphasis on the firm's ICAAP when determining Pillar 2A capital requirements for operational risk. Otherwise, the PRA will rely more on the methodology outlined below.

4.9D The operational risk methodology set out below mainly applies to significant firms; however, it may be extended by the PRA to other firms depending on the size, nature and complexity of a firm and the availability of data inputs (particularly historical losses).

4.10 The approach considers non-conduct risk separately from conduct risk. The Pillar 2A capital requirements are the sum of the capital adjustment for conduct risk and non-conduct risk.

4.11 [Deleted]

4.11A For the purpose of the PRA assessment, conduct risk losses are defined as losses in the Basel loss event category 'Clients, Products and Business Practices' (CPBP).[7] Currently, conduct and legal

5 While this comparison provides contextual insight to inform supervisory judgement, this does not replace the PRA's assessment of the firm's own analysis, evidence, and risk profile.
6 This generally refers to the Category 1 firms outlined in The Prudential Regulation Authority's approach to banking supervision.
7 See Annex 2 of the Operational Risk Part of the PRA Rulebook.

losses make up the bulk of CPBP losses. In the current environment CPBP losses are considered a proxy of conduct risk losses. All other Basel event types are considered non-conduct risk.

4.12 The PRA recognises that sizing capital for operational risk is a significant challenge. The loss distribution is unusually fat-tailed, with infrequent but very large losses, and there is a paucity of data. This problem applies to all operational risks but is especially acute for conduct risk. The loss estimates below do not overcome these fundamental problems but provide a simple, transparent and consistent way for the PRA to assess Pillar 2A operational risk across firms. While historical losses form an important input into the PRA's assessment, supervisory judgement is applied in evaluating the relevance of past losses to a firm's forward-looking operational risk profile.

4.13 [Deleted]

4.14 [Deleted]

Non-conduct risk

4.15 The PRA uses three loss estimates, described below, to inform the setting of a significant firm's Pillar 2A capital requirement for non-conduct risk.

(i) The first estimate (C1) is based on a firm's forecast of its expected losses due to operational risk in the next year(s), extrapolated to estimate the loss at the 1-in-1,000 year confidence level (assuming a given relationship between expected loss and unexpected loss).

(ii) The second estimate (C2) is based on the average of the firm's five largest losses by Basel event type for each year. The event type (excluding CPBP) resulting in the largest capital requirement (calibrated at a 1-in-1,000 year confidence level) is used. A Pareto distribution is used to calibrate the operational risk capital for each event type by using a predetermined shape parameter. Currently, the shape parameters are defined by event types but are constant for all firms. The PRA will regularly review the calibration and the five-year horizon to ensure that they remain appropriate.

(iii) The third estimate (C3) uses a firm's scenario. For each scenario, either one frequency and at least two severity impacts, or at least two annual impact assessments, are used to fit a calibration-free, fat-tailed distribution to determine the annual impact at a 1-in-1,000 year confidence level. The non-conduct C3 estimate is obtained by summing the five largest annual impacts to which a predefined diversification benefit (determined by the PRA) is applied. The same diversification benefit is applied to all types of firms.

4.16 Supervisory judgement is used to determine the operational risk add-on, taking into account considerations such as: the quality of the firm's own Pillar 2A assessment; the capital range generated by C1, C2 and C3; confidence in the firm's scenario analysis process and internal loss data; the quality of the firm's operational risk management and measurement framework; and peer group comparisons.

4.17 [Deleted]

Conduct risk

4.17A Pillar 2A capital for conduct risk of a significant firm is driven predominantly by supervisory judgement, which is informed by: supervisory knowledge of a firm's exposure to conduct risk; a firm's largest conduct losses over the past five years; the level of expected annual loss for conduct risk; and conduct-related scenarios where potential exposures over a shorter time horizon are

considered. The PRA's assessment of conduct risk under Pillar 2A focuses on the risk of losses arising from misconduct events that are currently unknown, as the potential losses associated with specific misconduct events that are already known are generally captured under Pillar 2B assessment. Where deemed appropriate, the PRA may also use the three loss estimates described above based on conduct risk data inputs.

Reporting

4.18 The PRA already collects information on operational risk historical losses from firms participating in the Stress Testing Data Framework (STDF) programme. All significant firms must report the data contained in the operational risk Pillar 2 data items in accordance with rule 2.3 in the Reporting Pillar 2 Part in the PRA Rulebook, unless those data have already been submitted as part of the STDF programme. Firms are required to submit the data with their ICAAP submissions.

4.19 The PRA may also request some firms that are not significant firms to report the same data and will notify the firms accordingly in advance of their submitting an ICAAP document. Expectations for non-significant firms in relation to including information in their ICAAP are set out in Chapter 2 of SS31/15.

5 Counterparty credit risk

5.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirement for counterparty credit risk (CCR), including settlement risk.

5.2 [Deleted]

Definition and scope of application

5.3 CCR is the risk of losses arising from the default of the counterparty to derivatives, margin lending, securities lending, repurchase and reverse repurchase or long settlement transactions before final settlement of the transaction's cash flows and where the exposure at default is crucially dependent on market factors.

5.3A The Pillar 2A approach to CCR applies to all firms and covers all positions across both trading and banking books.

5.3B The PRA's review of a firm's CCR and risk management standards applies equally to positions covered by advanced models or standardised approaches and, as such, is relevant to firms both with and without advanced model approval. In practice, however, the PRA expects the Pillar 2A regime for CCR to affect mainly those firms with material derivatives, margin lending, securities lending, repurchase and reverse repurchase or long settlement transaction businesses.

5.4 Where the underestimation of Pillar 1 capital is due to deficiencies of advanced models,[8] the PRA generally aims to address the capital shortfall by requiring the firm to remediate the shortcomings of the Pillar 1 model, with any additional capital requirements reflected via model multipliers or add-ons under Pillar 1 in line with paragraph 4A.3 of SS12/13, rather than setting Pillar 2A capital requirements.

5.5 The Pillar 1 SAs for calculating exposures on derivatives and securities financing transactions (SFTs) are relatively simple and may not be appropriate for all trades (eg more complicated trades or trades with unusual features). The PRA will review any risks that are not adequately captured by SAs in its Pillar 2 assessment and may ask firms to maintain additional capital under Pillar 2A to address identified deficiencies.

5.6 [Deleted]

[Deleted]

5.7 [Deleted]

Relationship with concentration risk

5.8 The PRA captures CCR exposures in the firm's assessment of credit concentration risk, as set out in Chapter 6. The PRA addresses concentration risk by looking at single name, sector and geographical credit concentration across all exposures, including exposures and facilities across the trading and banking book.

5.8A However, in line with the PRA's approach to assessing secured financing risks outlined below, the PRA expects firms' assessment of CCR capital requirements to take account of additional risks associated with large, concentrated or otherwise illiquid collateral positions.

8 These include the Internal Model Method referred to in Section 6 of Chapter 3 of the Counterparty Credit Risk (CRR) Part and the SFT VaR Method referred to in Article 221 of the Credit Risk Mitigation (CRR) Part.

Methodology for assessing Pillar 2A capital requirements for counterparty credit risk

5.9 The PRA may require firms to hold additional capital under Pillar 2A to cover risks likely to be underestimated or not covered under Pillar 1. The majority of such risks are generally expected to relate to residual risks arising from credit risk mitigation, wrong-way risk, settlement risk, and more generally, tail risks that may not be well captured under Pillar 1 risk measures.

Settlement risk

5.10 Settlement risk for transactions arising from a non-PvP (payment versus payment) settlement protocol may not be adequately capitalised under Pillar 1, and the PRA may challenge the appropriateness of a zero capital requirement for such risk and require firms to maintain additional capital under Pillar 2A.

5.11 As exposure to settlement risk may be 'lumpy' with variation over time, firms' assessments of settlement risk should also recognise that their exposure to settlement risk varies through time.

5.12 [Deleted]

5.13 The review of settlement risk management will also include those products that do not attract CCR capital but give rise to settlement risk (eg cash securities transactions that are not conducted on a delivery versus payment basis).

Residual risks, including residual risks relating to credit risk mitigation

5.14 Firms are expected to assess, and, if material, capitalise any residual risks arising from the use of credit risk mitigation techniques.

5.15 In particular, the PRA considers that the assumptions of Pillar 1 capital requirements may underestimate the risk on certain portfolios. This includes strongly over-collateralised portfolios where Pillar 1 capital requirements may be inadequate, trades where collateral received is concentrated in a single security or issuer, and large individual trades where the recognition of credit risk mitigation leads to comparatively low Pillar 1 requirements. The PRA expects firms to identify specific trades and portfolios where residual risks may be material and conduct their own assessment of the risk of loss associated with those positions.

5.15A The PRA's review will consider firms' assessments for measuring the risk against such positions. The PRA will also consider the appropriateness of the margin periods of risk and liquidation periods used to calculate volatility adjustments or to estimate the exposure against collateral assets whose actual price risk may be materially understated as a result of illiquidity or concentration of collateral.

5.15B The PRA's review will also consider the risk at an overall portfolio level. This is particularly relevant for portfolios of strongly over-collateralised trades, where the only residual risks arise from low-probability events which may not be reflected in the volatility haircuts applied or adequately captured in IMM models. The PRA's review will consider risks that might arise in a concentrated segment of the portfolio under a severe but plausible scenario, combining a sharp decline in collateral value with a cluster of correlated defaults. The PRA methodology largely aims to consider counterparty defaults. However, if a firm has significant concentrations of collateral such that the default of a single issuer or group of closely related issuers may result in material losses, the PRA will also consider whether the firm has adequately capitalised these in its ICAAP.

Wrong-way risk

5.16 Other than for specific wrong-way risk that is legally-connected,[9] the CCR capital framework assumes a generic and relatively low level of dependence between the creditworthiness of a firm's counterparty and the level of exposure to that counterparty. Wrong-way risk, where there is an adverse relationship between the exposure to the counterparty and the creditworthiness of that counterparty, arises in circumstances in which this assumption does not hold.

5.17 The PRA expects firms to identify, monitor, manage, mitigate and capitalise their wrong-way risk appropriately. Misidentification of wrong-way risk leads to underestimation of risks and undercapitalisation. Concentrated wrong-way exposures, eg to one or more counterparties in a particular country with similar risk profiles, are of particular interest. The PRA will review the capitalisation of any such positions as part of its assessment and may ask firms to hold additional capital under Pillar 2A to address identified deficiencies.

Other risks

5.18 In addition to the risks associated with secured financing trades, wrong-way risk, or settlement risk, the PRA may also request a firm to hold additional capital under Pillar 2A for other CCR which the PRA has assessed not to be sufficiently captured through Pillar 1 or otherwise mitigated. Example of such risk may include, but are not limited to, weaknesses in firms' stress testing, weaknesses of firms' model validation and governance processes, the adequacy of Pillar 1 capital requirements for CVA volatility risk, the accuracy of exposures under non-advanced methods, and any other tail risks that may not be well captured under Pillar 1 risk measures.

5.18A For all such risks identified, the PRA will seek to ensure that, where material, these are included in Pillar 2A through the use of prudent methodologies designed to measure risk to an appropriate level of severity, in line with the PRA's target overall capital standard, over a period commensurate with the liquidity of the positions/risks. The PRA will aggregate the add-ons on a gross basis across different risk types in its assessment; allowance will be given for any relevant Pillar 1 mitigants.

[Deleted]

5.19 [Deleted]

5.20 [Deleted]

Reporting

5.20A To support the PRA's assessment of CCR Pillar 2A capital requirements, firms are requested to provide at a minimum the information set out below alongside their ICAAP submission, with data as-at their ICAAP reference date.

5.21 Although the Pillar 2A capital requirement is mainly based on positions held as at the date specified above, in cases where positions relate to portfolios that are concentrated in a small number of underlying names and/or show variability over time (for example, for settlement risk), include information on this variation and describe how your capital assessment leads to the risk being prudently capitalised over time.

General wrong-way risk (GWWR)

5.22 Firms are requested to provide the following information:

9 As defined in Article 291(1)(b) of the Counterparty Credit Risk (CRR) Part.

- Gross notional of all derivative and SFT positions where the country of risk of either the derivative underlying, or collateral posted to the firm, is the same as the country of risk of the counterparty, broken down by country; and

- Wrong-way risk stress scenario impact information.

Residual risk due to credit risk mitigation

5.23 In order to better understand the potential risks arising from concentrated collateral, as described above, the PRA requests detailed transaction-level information on all secured financing exposures (cash and synthetic) where the exposure (net of any cash margin) is secured against a single collateral asset or group of materially correlated assets. In collating this information, include reverse repos, securities borrowing transactions, collateral swaps, prime brokerage agreements, margin lending and total return swaps. An exposure should not be considered as secured against a single collateral asset if it is included in a legally enforceable netting agreement alongside other financing transactions against which different collateral assets have been posted to you. Exposures secured against US Treasuries and UK gilts should be excluded from the submission.

5.24 For all transactions meeting the criteria set out above, please provide the following information:

- Counterparty information:

  (i) Counterparty name;

  (ii) Counterparty country of domicile;

  (iii) Counterparty sector; and

  (iv) Counterparty credit rating

- Collateral information (applicable to all relevant assets):

  (i) Issuer name;

  (ii) Issuer country of domicile;

  (iii) Collateral currency;

  (iv) Issuer sector;

  (v) Relevant credit rating; and

  (vi) Assumed recovery in default (if available or best estimate)

- Transaction information:

  (i) Current market value of cash or assets lent (net of any cash margin);

  (ii) Current market value of collateral received; and

  (iii) Amount of Pillar 1 CCR capital held against the transaction.

Settlement risk

5.25 Although there may be Pillar 1 capital requirements for trades that have failed to settle, there are no ex-ante capital requirements to cover the principal risk that arises when a counterparty fails to deliver a security or value (eg cash) while the firm has already delivered its side of the trade. This risk potentially material for products which settle free of payment (FOP) rather than via a recognised PvP protocol.

5.26 The PRA requests that firms provide a quantification of the risk arising from non-PvP settlement failures along with details of the methodology used.

6 Credit concentration risk

6.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirement for single name, sector and geographical credit concentration risk in the banking and trading books.

Definition and scope of application

6.2 Credit concentration risk is the risk of losses arising as a result of concentrations of exposures due to imperfect diversification. This imperfect diversification can arise from the small size of a portfolio or a large number of exposures to specific obligors (single name concentration) or from imperfect diversification with respect to economic sectors or geographical regions.

6.3 For the purposes of the methodology specified below, only wholesale credit portfolios are considered for single name and sector concentration risk (excluding securitisation, intra-group exposures[10] and non-performing loans). All credit portfolios other than residential mortgage portfolios on the standardised approach, intragroup exposures and defaulted assets are considered for geographic concentration risk.

Methodology for assessing Pillar 2A capital requirements for credit concentration risk

6.4 Firms are required to calculate a credit concentration risk measure, the Herfindahl-Hirschman Index (HHI), for all relevant portfolios (single name, pre-defined industry sectors and geographic regions). The HHI is defined as the sum of the squares of the relative portfolio shares of all borrowers (these portfolio shares are calculated using risk-weighted assets (RWAs)). Well-diversified portfolios have an HHI close to 0, whilst the most concentrated portfolios have a number close to 1. The HHI is a good indicator of the level of credit concentration risk within a portfolio. Mapping models translate a firm's HHI into a proposed capital add-on range. The table mapping the HHI for single name, sector and geographical credit concentration to capital add-on ranges is set out in Figure 1.

6.5 The mapping models for single name, sector and geographical credit concentration are described below.

Single name concentration risk

6.6 The Gordy-Lütkebohmert (GL) methodology[11] is an extension of the Basel risk-weight function and aims to quantify the undiversified idiosyncratic risk in a credit portfolio not considered to be sufficiently granular. The GL methodology uses credit risk parameters to quantify the single name

10 Where the calculation is in respect of a ring-fenced body on a sub-consolidated basis, intragroup exposures to group entities not included in the sub-consolidation are treated as if they were exposures to third parties.
11 Gordy, M and Lütkebohmert, E (2007), 'Granularity adjustment for Basel II', Discussion Paper 01/2007, Deutsche Bundesbank.

risk in a portfolio and suggests the necessary capital add-on range to account for single name concentration risk.

Sector and geographic credit concentration risk

6.7 When assessing the degree to which a firm might be subject to industry sector or geographical credit concentration risk, the PRA adopts a methodology based on published multi-factor capital methodologies (eg Düllmann and Masschelein).[12]

6.8 The PRA has constructed a benchmark portfolio based on the average lending distribution from a sample of well-diversified firms. The PRA developed a multi-factor capital model, which takes into account the default rate volatilities (intra-sector and intra-region correlation) of eight pre-defined geographic regions and industry sectors as well as default rate volatility correlations between pre-defined geographic regions and industry sectors (inter-sector and inter-region correlations).

6.9 Sectors are broadly aligned to standard industry classification (SIC) codes and NACE (Nomenclature of Economic Classification) codes (set out in **Table B**), while the geographical regions are based on the International Monetary Fund's definition of the main global economic regions (set out in **Table C**). The United Kingdom is considered separately.

6.10 The multi-factor model is calibrated so that the capital requirement for a well-diversified lending portfolio (the benchmark portfolio) using the multi-factor model and a single risk factor model (on which the IRB framework is based) are equal. The PRA created a sequence of portfolios with increasing levels of concentration and compared the capital requirements derived from the multi-factor model with those derived from the single-factor risk model. The difference in the capital requirements between the multi-factor and single-factor risk model (capital add-ons) was compared to the HHI measures of concentration. The relationship between the two measures is strong. The PRA has therefore mapped the HHI measures to capital add-on ranges derived from its multi-factor capital model.

Figure 1 **Concentration risk – mapping of capital add-on ranges to HHI**

Concentration Risk Bucket	1	2	3	4	5
Single name concentration risk (granularity):					
HHI_{RWA}	0% 0.29%	0.29% 0.59%	0.59% 1.15%	1.15% 1.65%	> 1.65%
Capital Add-on (% portfolio RWA)	0% 0.5%	0.5% 1%	1% 2%	2% 3%	3% 4%
Sector concentration risk:					
HHI_{RWA}	11.1% 20.3%	20.3% 25.8%	25.8% 41.7%	41.7% 67.4%	> 67.4%
Capital Add-on (% portfolio RWA)	0% 0.25%	0.25% 0.5%	0.5% 1%	1% 1.5%	1.5% 2.8%(*)
Geographic (international) concentration risk:					
HHI_{RWA}	11.1% 24.9%	24.9% 34.5%	34.5% 47.8%	47.8% 77.9%	> 77.9%
Capital Add-on (% portfolio RWA)	0% 0.2%	0.2% 0.5%	0.5% 0.8%	0.8% 1.25%	1.25% 1.4%

(*) 2.8% for CRE but 2% for financial.

12 Düllmann, K and Masschelein, N (2007), 'A tractable model to measure sector concentration risk in credit portfolios', Journal of Financial Services Research, Vol. 32, pages 55–79.

Table B Breakdown of sectors

Agriculture, forestry and fishing

Construction

Financial industry (bank and non-bank)

Real estate (commercial)

Manufacturing

Mining and quarrying

Wholesale and retail trade

Services and other

Transport, storage and utilities

Table C Geographic breakdown

United Kingdom

North America

South/Latin America and Caribbean

European (west) area

Eastern Europe and Central Asia (including Russian Federation)

East Asia and Pacific

South Asia

Middle East and North Africa

Sub-Saharan Africa

6.11 Given a capital add-on range produced by the concentration risk models, the PRA exercises its judgement as to where within that range the capital add-on should be set. In order to promote consistency of judgement, the mid-point of the range acts as a starting point. When setting the Pillar 2A credit concentration risk capital add-on, the PRA may consider a range of factors including firms' own concentration risk assessments; firms' ability to manage concentration risk; the degree to which conservatism is reflected in firms' Pillar 1 RWAs; instances where portfolio correlations are not adequately captured; any other factors not adequately captured under the quantitative assessment; and business models.

6.12 The PRA will continue to be proportionate in its approach to setting capital; supervisors may exercise judgement for small firms where they identify that the credit concentration risk methodology could overstate risks or could incentivise risk-taking behaviour.

6.13 The quantitative methodologies informing the recommended capital add-on ranges have been constructed so as to apply independently of one another in order to avoid double counting. The capital add-on for credit concentration risk is therefore the sum of the respective add-ons for each credit concentration risk type.

6.14 The measure of credit concentration risk is based on the Pillar 1 risk assessment (ie the risk weighting of the obligor, sector or geographic regions). Exposures with low risk weights therefore attract a lower concentration risk add-on compared to exposures with higher risk weights, everything else constant.

6.15 Where the PRA considers that a firm's credit risk RWAs do not accurately reflect the underlying credit risk within a portfolio, the Pillar 2A credit concentration risk capital add-on may be adjusted upwards.

6.16 Capital held against potential losses from credit valuation adjustments are excluded from the credit concentration risk assessment.

Reporting

6.17 All firms must report the data contained in the credit concentration risk Pillar 2 data items in accordance with Reporting Pillar 2, 2.2. Firms are required to submit the data with their ICAAP submissions. These data items include information on the portfolio HHI for each of the concentration risk types and additional information on portfolio composition.

7 Interest rate risk in the banking book

7.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirement for interest rate risk in the non-trading book, commonly known as interest rate risk in the banking book (IRRBB).

Definition of scope of application

7.2 IRRBB is the risk of losses arising from changes in the interest rates associated with banking book items.

7.3 For larger or more complex firms the PRA employs a comprehensive approach to its IRRBB risk assessment that reviews duration risk, basis risk and, as necessary, optionality risk.

- Duration risk arises when the re-pricing of banking products (assets and liabilities) is mismatched across time buckets. Firms generate these positions via the normal running of their banking book and manage the resultant risks through their internal management processes and hedging activities.

- Basis risk is generated by banking book items that re-price in relation to different reference rates. The most common and material basis risks seen within UK banks derive from products re-pricing against policy rates (eg Bank Rate) and market rates (eg SONIA). As part of the review of basis risk the PRA also considers asset swap spread risk, which typically arises when firms hedge the duration risk associated with fixed rate securities using derivatives (typically interest rate swaps).

- Optionality risk arises from the discretion that a bank's customers and counterparties have in respect of their contractual relations with the bank in the form of financial instruments. Embedded options are diverse and firm-specific and include prepayment risk on fixed rate loans and deposits and switching risk on non-interest bearing current accounts. Optionality risk is considered separately when material.

7.4 Smaller and less complex firms are subject to a standard approach which is based on reviewing their own policy limits for interest rate risk and, where appropriate, basis risk. A proportionate approach is applied where a firm demonstrates some aspects of complexity with a detailed review undertaken of the policy limit-setting approach, the potential for any breaches and the ability of the firm to manage the associated risks.

Comprehensive methodology for assessing Pillar 2A capital requirements for IRRBB for larger firms or firms with more complex IRRBB exposures

7.5 Large firms or those with more complex IRRBB risk exposures are subject to a comprehensive risk assessment process. This assessment involves the collection and processing of granular risk data provided by the firm and a review process including firm meetings and discussion. Together this ensures that the PRA has the appropriate information to understand and evaluate the firm's IRRBB risks and management processes.

7.6 The data for this process are collected in a standard data report from the firm. The data are processed using internal PRA systems. A range of value-at-risk and earnings-at-risk based measures are used to calculate capital requirements. The FSA017 regulatory return, which provides more aggregated re-pricing information, can be used to validate the data provided.

7.7 The methodology with respect to duration risk, basis risk and optionality risk is detailed below.

Duration risk

7.8 To assess duration risk, firms are first requested to allocate all items to the relevant time bucket and to report their exposure in each time bucket, as follows:

- fixed-rate assets or liabilities are allocated to the time bucket corresponding to their maturity (allowing for behavioural prepayment adjustments);
- floating-rate assets or liabilities are allocated to the time bucket corresponding to the frequency of re-set, with behavioural adjustments for administered rate products;
- derivatives are allocated according to their contractual re-pricing dates; and
- non-determinate items (ie those that do not have a pre-set contractual maturity, such as sight deposits and current accounts) are allocated to time buckets based on firms' assumptions. The PRA expects firms to justify these assumptions and any changes to them.

7.9 Second, the net interest rate gap of the firm for each time bucket is calculated for each material currency.

7.10 A shock is then applied to the net interest rate position for each respective time bucket. The methodology uses a range of currency-specific yield curve volatility parameters and a set of different interest rate shocks.

7.11 The VaR model is calibrated to a 1-in-100 year confidence level and uses a one-year holding period to reflect the potentially illiquid nature of banking book positions. Historical observations normally include ten years of yield curve data and are designed to capture stressed market conditions.

7.12 For each significant currency, the different interest rate shocks are applied to the net interest rate gaps in each time bucket. The methodology uses both government yield curves and swap rate curves by material currency in order to calculate the potential impact of the interest rate risk shocks.

7.13 Economic value (EV) changes are then summed up across all time buckets in order to assess the change of the firm's EV due to its IRRBB exposure to an interest rate shock.

Basis risk

7.14 The review of basis risk concentrates on net policy rate and net market rate (contractual and behavioural) exposures including on-and off-balance sheet positions. The assessment is designed to capture the risk of market funding costs rising relative to a more stable policy benchmark.

7.15 The assessment process involves collecting information on variable rate re-pricing in order to calculate the net policy rate position by currency. These positions include: customer products linked contractually to policy rates; customer products that are expected to price in line with policy rates behaviourally; balances held with central banks that are currently priced in line with policy rates; and derivative hedges based on policy rates or correlated indices.

7.16 The PRA measures basis risks by applying to each firm's nominal exposure a change of the spread between the two reference rates on which the bank incurs basis risk exposure. The potential movement between the reference rates employs a statistical approach based on historical observations, at a 1-in-100 year confidence level.

7.17 The PRA measures how the price of hedging market versus policy rate exposures for a one-year period can move over a three-month timeframe. This is likely to involve the use of relevant swap curves, eg Overnight Indexed Swaps.

7.18 The approach generates a one-year earnings at risk (EaR) measure to assess the capital requirement for basis risk. The calculation considers the net Bank Rate position exposed to a funding shock.

7.19 Swap spread risk arises when firms hedge the duration risk associated with fixed rate securities using derivatives (typically interest rate swaps). This generates a valuation risk through asymmetric movements between the value of the bond (eg gilt) and the derivative (eg swap). The ongoing valuation risks should be managed within appropriate risk limits and capitalised.

7.20 The PRA considers relative movements in the value of securities, eg gilts versus swaps (of similar maturities) over a ten-year period via a Value at Risk (VaR) model calibrated at a 1-in100 year confidence level assuming a one-year holding period.

Optionality risks

7.21 In the United Kingdom, prepayment risk on lending is limited by the typically short re-pricing duration of fixed-rate products (retail mortgages and unsecured lending are typically fixed for terms not exceeding five years).

7.22 The impact of behavioural factors on certain non-determinate liabilities such as current accounts (eg customer switching) should be considered by firms. The behaviour of some components of these current account balances remains uncertain and may be affected by a change in interest rates.

7.23 The comprehensive approach involves discussing optionality risks with the firm during the risk assessment process in order to understand the materiality (or otherwise) of embedded option features. Dependent on the nature of a firm's business this could include non-UK products that have material embedded option features for which additional information may be requested.

Other IRRBB risks

7.24 Other IRRBB risks that may be considered, if material, include the risks arising from legacy market rates, hedge accounting operations and structural foreign exchange exposures. The PRA monitors these and other emerging risks to ensure such risks are capitalised adequately.

Aggregation of IRRBB risks

7.25 Individual capital requirements for the different sub-components of IRRBB referenced above are then summed to calculate a firm's IRRBB capital requirement based on the data provided.

7.26 The process also assesses the quality of the firm's management, data and governance of IRRBB under the comprehensive approach and considers any additional capital required to reflect failings in a firm's practice.

Standard methodology for assessing Pillar 2A capital requirements for IRRBB for smaller firms and firms with less complex IRRBB exposures

7.27 The PRA reviews the internal policy limits used by a firm. If appropriate (and these are most usually based on the economic impact of a 200 basis point shift in interest rates) the policy limits are used as the basis for determining IRRBB.

Basis risk

7.28 Under the standard methodology, the PRA does not assess Pillar 2A for basis risk. Nevertheless, the PRA expects that a bank or building society mitigates its basis risk by setting limits on:

- its exposure to basis risk for each type of basis risk mismatch; and
- the sensitivity of its net interest margin to basis risk.

Behavioural adjustments

7.29 The PRA may allow firms, on a case-by-case basis, to allocate maturities based on behavioural assumptions.

Reporting

7.30 The PRA uses existing data reports, such as the Stress Testing Data Framework (STDF) programme for larger firms, or FSA017 for smaller firms, and works with individual firms to set out additional bespoke data requirements where needed for the IRRBB assessment. The PRA may also ask firms to submit internal management information relevant to IRRBB.

8 Pension obligation risk

8.1 This chapter sets the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirement for pension obligation risk.

Definition and scope of application

8.2 Pension obligation risk is the risk:

- to a firm caused by its contractual or other liabilities to, or with respect to, a pension scheme (whether established for its employees or those of a related company or otherwise); and
- that a firm will make payments or other contributions to, or with respect to, a pension scheme because of a moral obligation or because the firm considers that it needs to do so for some other reason.

8.3 Pension obligation risk relates to defined benefit pension schemes and defined contribution schemes offering guaranteed returns that are not fully matched by underlying investments. Hybrid schemes are considered to be defined benefit pension schemes. Pension obligation risk includes the risk arising from overseas pension schemes.

8.4 A sponsoring firm is a firm with contractual or potential commitments to one or several defined benefit pension schemes covering its employees or the employees of another entity within the same group.

8.5 Pension obligation risk manifests itself in different forms. The PRA's focus is on the impact that changes in the value of a pension scheme could have on Common Equity Tier 1 (CET1). The accounting deficit of a firm's pension scheme is reflected in CET1. Under Article 36(1)(e) of the Own Funds (CRR) Part of the PRA Rulebook, any surpluses are deducted. Firms are therefore exposed to pension obligation risk because a material increase in the pension scheme's deficit under adverse conditions will have a negative impact on their CET1.

8.6 A firm that does not reflect its pension scheme deficit in CET1 (eg because another company within the group recognises the deficit on its balance sheet) may still be exposed to indirect pension

obligation risk, where the UK Pensions Regulator (TPR) has the power to require the firm to support the pension scheme, or where the failure of the company that recognises the deficit could destabilise the group, leading to the risk of contagion.

8.7 The PRA does not have a remit to protect members of defined benefit pension fund schemes against the failure of those plans. Nevertheless, a firm must at all times comply with the overall financial adequacy rule. Accordingly, the PRA aims to ensure that firms are adequately capitalised against their defined benefit pension obligations.

Methodology for assessing Pillar 2A capital requirements for pension obligation risk

8.8 The PRA's framework for Pillar 2A pension obligation risk capital consists of two elements:

- the firm's own assessment of the appropriate level of Pillar 2A pension obligation risk capital; and
- the PRA's review of the firm's assessment

8.9 [Deleted]

8.10 The PRA's review uses an approach which corresponds to the value at risk of the accounting surplus or deficit consistent with a stress event that has no more than a 1 in 200 probability of occurring in a one-year period. This includes consideration of various factors including equity, credit, interest, inflation and longevity risks.

8.11 [Deleted]

8.12 [Deleted]

8.13 Firms' approaches to setting the valuation assumptions should be stable over time and any changes to the approach should be justified in the ICAAP. The PRA will review the robustness of the valuation assumptions and may adjust the surplus or deficit in the capital requirements calculations where the assumptions are found to be out of line with other firms, or where an alternative set of assumptions better satisfies the capital adequacy rules.

8.14 [Deleted]

8.15 [Deleted]

8.16 [Deleted]

Offsets and management actions

8.17 Offsets are reductions in a firm's Pillar 2A capital requirement to reflect factors present at the ICAAP effective date which would reduce the impact of a stress on the firm. Management actions are steps the firm could, and would, take when a stress occurs in order to reduce its impact. The PRA will review the firm's offsets and management actions and will adjust them, if necessary, when determining the PRA's view of the capital required.

8.18 The PRA will decide whether to accept offsets and management actions by applying the following criteria:

- financial performance — the efficacy of offsets and management actions should not depend on assumptions as to the future financial performance of the firm, either before or after a stress;

- independence from the decisions and actions of third parties — the efficacy of offsets and management actions should not depend on assumptions as to the future agreement or behaviour of third parties, either before or after a stress; and

- immediacy — recognised offsets should reflect a risk mitigation benefit that is already effective when the offset is taken. Management actions should be capable of taking effect quickly enough to mitigate the stress to which they are the proposed response.

8.19 The PRA will apply the eligibility criteria in a strict manner on a case-by-case basis. Offsets and management actions that do not meet the eligibility criteria will not be accepted.

Reporting

8.20 The PRA already collects information on defined benefit pension schemes from firms participating in the Stress Testing Data Framework (STDF) programme. All PRA firms with defined benefit pension schemes are required to report the data contained in the pension risk data item in accordance with Reporting Pillar 2, 2.6, unless those data have already been submitted as part of the STDF programme. Firms that are in scope are required to submit the data with their ICAAP submissions.

8A Group Risk, including RFB group risk

8A.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's Pillar 2A capital requirement for group risk, including RFB group risk, where groups contain an RFB sub-group.

Definition and scope of application

8A.2 Group risk, as defined in the PRA Rulebook,[13] means the risk that the financial position of a firm may be adversely affected by its relationships (financial or non-financial) with other entities in the same group or by risk which may affect the financial position of the whole group, including reputational contagion.

Methodology

8A.2A The PRA's assessment of group risk will be informed by the following:

- the extent to which the allocation of the total amount of financial resources, own funds and internal capital between different parts of the consolidation group adequately reflects the nature, level and distribution of the risks to which the consolidation group is subject;

- the extent to which, for any given risk type, the minimum requirements applied to an entity established outside the United Kingdom, on an individual or sub-consolidated basis, exceed the entity's share[14] of the consolidated group requirements for the same risk. When making this

13 Internal Capital Adequacy Assessment 1.2.

14 An entity's share of a particular consolidated group capital requirement can be determined by multiplying that consolidated group capital requirement by the proportion of the consolidated group's Pillar 1 RWAs that are attributable to that entity. The consolidated group's RWAs that are attributable to an entity is calculated as the entity's Pillar 1 RWAs, calculated on the same basis as the group RWAs, minus the risk-weighted exposures of the entity to other group entities.

assessment, the PRA would not generally take into account requirements that are attributable to risks that:

(i) are already mitigated through the risk based capital framework[15] or by other means;[16] or

(ii) net off in consolidation (for example, intragroup risks and offsetting positions); and

- where a firm is a member of a group in which a qualifying parent undertaking[17] has a double leverage ratio above 100%, or is projecting one above 100%, the firm's approach to managing the risks of double leverage, including the cash flow risks, and the credibility of its related stress testing and scenario analysis. For this purpose, the double leverage ratio is defined as a parent company's common equity capital investment in its subsidiaries[18] divided by its own common equity capital.[19]

8A.2B Supervisory judgement is used to determine:

- the amount of firm-specific Pillar 2A capital requirements for group risk; and

- any steps that need to be taken in respect of any double leverage being used or proposing to be used by a firm's qualifying parent undertaking. Such steps may include, for example, imposing a specific limit on the amount of double leverage a firm's qualifying parent undertaking can use.[20]

RFB group risk

8A.3 RFB group risk means, in relation to a consolidation group containing an RFB sub-group,[21] the risk that the financial position of a firm on a consolidated basis may be adversely affected by the minimum capital and buffers applicable at the level of the RFB sub-group, such that there is insufficient capital within (or an inappropriate distribution of capital across) the consolidated group to cover the risks of the consolidated group.

Methodology

8A.4 Where minimum capital (Pillar 1 or Pillar 2A) of the RFB sub-group for an identified risk is higher than the RFB sub-group's share of the minimum capital for that risk on a consolidated basis, the difference will usually be reflected in Pillar 2A capital requirements on a consolidated basis to reflect the associated RFB group risk at the consolidated group level.

8A.5 The PRA's assessment of the total amount of the Pillar 2A capital requirement for RFB group risk will be informed by the following, to the extent not already captured by the assessment of other elements of the capital framework:

15 For example, a PRA authorised firm may have permission to use an IRB model to calculate consolidated capital requirements in respect of a portfolio of credit risk exposures. If its overseas subsidiary is required to use a standardised approach for the same portfolio of credit risk exposures (on an individual or sub-consolidated basis), and as a result, it is subject to higher requirements in respect of that portfolio, the PRA would not take the difference into account in its assessment of group risk.

16 For example, the risk of a local entity might be mitigated at the group level through risk management processes or internal control mechanisms established at the group level.

17 Section 192B FSMA.

18 As defined in paragraph 3.29A of SS31/15.

19 As defined in paragraph 3.29A of SS31/15.

20 For example, by exercising the PRA's power of direction under Section 192C of the Financial Services and Markets Act (Power of Direction over Qualifying Parent Undertakings).

21 An RFB sub-group is a sub-set of related group entities within a consolidation group, consisting of one or more RFBs and other legal entities, which is established when the PRA gives effect to Article 11(5) of the CRR.

- the difference between:

  (i) the amount of capital applicable at the RFB sub-group level to cover credit concentration risk identified on a sub-consolidated basis; and

  (ii) the RFB sub-group's share of the capital held by the consolidated group to cover credit concentration risk identified for the consolidation group.

  The share referred to in point (ii) above will be calculated as:

  (a) the amount of capital applicable at the level of the consolidated group to cover the credit concentration risk identified for the consolidation group, multiplied by

  (b) the proportion of the consolidated group's credit risk RWAs that are attributable to the RFB sub-group;[22]

- any minimum capital applicable at the level of the RFB sub-group that is attributable to risk-weighted exposures of the RFB sub-group to group entities that are not members of the RFB sub-group (to the extent RFB group risk in relation to those exposures is not already captured by the assessment of other aspects of RFB group risk covered in this paragraph); and

- as appropriate, the amount by which the minimum capital applicable at the RFB sub-group level to cover any other risk exceeds the amount of minimum capital applicable at the consolidated group level to cover the same risk. (This could include, for example, interest rate risk in the banking book, operational risk or the risk of a consolidation group being undercapitalised following the application of PRA rules on deduction of significant investments in financial sector entities at the level of the RFB sub-group.)[23]

Pension obligation risk

8A.6 As set out in SS8/16 'Ring-fenced bodies (RFBs)',[24] the PRA expects an RFB to ensure it has fully and appropriately considered group risk arising in respect of its pension arrangements when conducting its assessment of pension obligation risks at the level of the RFB sub-group. The PRA expects an RFB to consider all relevant factors when performing its assessment, including, but not limited to, its current share of consolidated group pension obligations, and its expected future share where it is making changes to its pension arrangements. An RFB's assessment should not be limited to a simple allocation of a share of the consolidated group's pension obligation risk. A full assessment may therefore result in a higher capital requirement than if the RFB were to apply a 'share-of-group' approach, particularly in the period prior to 1 January 2026. The PRA also expects to apply its existing policy, as set out in SS31/15 'The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP)',[25] when assessing the pension obligation risk of a consolidated group containing an RFB. The PRA expects the assessment of RFB group risk at group level to be unaffected by the assessment of the pension obligation risk for the RFB sub-group given:

22 The proportion of the consolidated group's credit risk RWAs that are attributable to the RFB sub-group is calculated as the RFB sub-group's credit risk RWAs (calculated on a sub-consolidated basis) minus the risk-weighted exposures of the RFB subgroup to group entities that are not members of the RFB sub-group.
23 See rule 2.1 in the Definition of Capital Part of the PRA Rulebook.
24 https://www.bankofengland.co.uk/prudential-regulation/publication/2016/ring-fenced-bodies-ss.
25 https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internal-capital-adequacy-assessment-process-and-supervisory-review-ss.

- the transitional nature of the risk; and

- assuming the sum of the amount of pension risks at the level of the RFB sub-group and group entities that are not members of the RFB sub-group is not expected to increase to a level above that of the consolidated group in the event that the RFB will have to assume the pension liabilities of group entities that are not members of the RFB sub-group.

This exception only applies to the assessment of pension risk and should not be taken to mean that other risks with proportionately higher requirements should not be included in the assessment of RFB group risk.

Reporting

8A.7 Firms are required to submit data in respect of the Pillar 2A RFB group risk add-on in FSA071 'Firm Information and Pillar 2 Summary' template.[26]

26 https://www.bankofengland.co.uk/prudential-regulation/regulatory-reporting/regulatory-reporting-banking-sector/banks-building-societies-and-investment-firms.

8B Pillar 2A lending adjustments

8B.1 This chapter sets out the PRA's methodology for setting a firm's Pillar 2A adjustments for eligible SME and infrastructure lending. In addition, the appendices of this SoP provide hyperlinks to the data templates and related instructions required for the calculation of the Pillar 2A lending adjustments.

Definition and scope of application

8B.2 As part of the Capital Supervisory Review and Evaluation Process (C-SREP), the PRA will calculate Pillar 2A lending adjustments for firms that submit the necessary data alongside their ICAAP submission. The PRA will calculate the SME and infrastructure lending adjustments for exposures that meet the eligibility criteria as set out in the 'Instructions for Pillar 2 SME lending adjustment and infrastructure lending adjustment data templates' (see the appendices).

Methodology for assessing Pillar 2A lending adjustments

8B.3 The SME lending adjustment and the infrastructure lending adjustment are calculated by multiplying two components:

- 'ΔRWA' which is the impact on a firm's RWAs arising from the application of the SME Factor and/or Infrastructure Factor as defined in the 'Instructions for Pillar 2 SME lending adjustment and infrastructure lending adjustment data templates' (see the appendices); and

- the 'capital adjustment factor' which is a firm-specific multiplier that converts ΔRWA into the Pillar 2A lending adjustments amount.

8B.4 'ΔRWA' is calculated by aggregating the difference between: (i) the Pillar 1 RWAs for eligible exposures; and (ii) the Pillar 1 RWAs for eligible exposures with the SME Factor or Infrastructure Factor applied. In a limited number of cases, this approach is adjusted for certain types of eligible exposures for which risk weights are calculated using the SA or the slotting approach as set out in Tables A3 and A4 below.

8B.5 For exposures where a credit risk mitigation (CRM) method is applied under Articles 222, 232, 235, or 236 of the Credit Risk Mitigation (CRR) Part of the PRA Rulebook, including where the exposure or the protected part receives a different risk weight due to the application of CRM (eg exposures under the Risk-Weight Substitution Method):

- the eligibility of an exposure and the adjusted methodology set out in Tables A3 and A4 are determined based on the underlying exposures, ignoring the application of the CRM method; and

- where applicable, the impact of the application of the SME Factor and/or Infrastructure Factor to the protected and unprotected parts of the exposure (where applicable) are calculated separately and both will contribute to 'ΔRWA'. The adjusted methodology in Tables A3 and A4 are only applied for the calculation of the impact for the unprotected part of the exposure.

Table A3 – Adjusted SA general methodology for calculating ΔRWA (for SME lending adjustment)

Exposure type	Approach to calculating ΔRWA
Regulatory retail exposures to SMEs - transactor exposures	For exposures assigned a risk weight of 45% under Article 123(3)(a) of the Credit Risk: Standardised Approach (CRR) Part, ΔRWA is zero.

Unrated corporate exposures to SMEs	For exposures assigned a risk weight of 85% under Article 122(11) of the Credit Risk: Standardised Approach (CRR) Part, calculate the difference between: (i) RWA calculated with a risk weight of 85% assigned in accordance with Article 122(11) of the Credit Risk: Standardised Approach (CRR) Part; and (ii) RWA calculated with a risk weight of 100% assigned in accordance with Article 122(5) of the Credit Risk: Standardised Approach (CRR) Part (the risk weight assigned to an unrated corporate exposure under the risk neutral approach) and if the SME Factor was subsequently applied (ie 76.19% – 85%).
Regulatory real estate exposures to SMEs that are not materially dependent on the cash-flows generated by the property	For residential real estate, for the part of the exposure assigned a risk weight of 20% under Article 124F(1)(a) of the Credit Risk: Standardised Approach (CRR) Part, the ΔRWA is zero. For commercial real estate, for the part of the exposure assigned a risk weight of 60% under Article 124H(1)(a) of the Credit Risk: Standardised Approach (CRR) Part, the ΔRWA is zero. For any part of the exposure assigned a risk weight of 85% under Articles 124L(1)(c) or 124L(1)(d) of the Credit Risk: Standardised Approach (CRR) Part, calculate the difference between: (i) RWA calculated with a risk weight of 85% assigned in accordance with Articles 124L(1)(c) or 124L(1)(d) of the Credit Risk: Standardised Approach (CRR) Part; and (ii) RWA calculated with a risk weight of 100% assigned in accordance with Article 122(5) of the Credit Risk: Standardised Approach (CRR) Part (the risk weight assigned to an unrated corporate exposure under the risk neutral approach) and if the SME Factor was subsequently applied (ie 76.19% – 85%).
Other real estate exposures that are not materially dependent on the cash-flows generated by the property where the counterparty is assigned a risk weight of 85% under Articles 124L(1)(c) or 124L(1)(d) of the Credit Risk: Standardised Approach (CRR) Part	Calculate the difference between: (i) RWA calculated with a risk weight of 85% assigned in accordance with Articles 124L(1)(c) or 124L(1)(d) of the Credit Risk: Standardised Approach (CRR) Part; and (ii) RWA calculated with a risk weight of 100% assigned in accordance with Article 122(5) of the Credit Risk: Standardised Approach (CRR) Part (the risk weight assigned to an unrated corporate exposure under the risk neutral approach) and if the SME Factor was subsequently applied (ie 76.19% – 85%).

Table A4 – Adjusted SA and the slotting approach general methodology for calculating ΔRWA (for infrastructure lending adjustment)

Exposure type	Approach to calculating ΔRWA
High-quality unrated project finance exposures in the operational phase (HQPF)	For exposures assigned a risk weight of 80% under Article 122B(4) of the Credit Risk: Standardised Approach (CRR) Part, calculate the difference between: (i) RWA calculated with the risk weight of 80% assigned in accordance with Article 122B(4) of the Credit Risk: Standardised Approach (CRR) Part; and (ii) RWA calculated with the risk weight of 100% assigned in accordance with Article 122B(2)(c) of the Credit Risk: Standardised Approach (CRR) Part and if the Infrastructure Factor was subsequently applied (ie 75%).

Substantially stronger project finance exposures (under the slotting approach)	For exposures assigned a risk weight of 50% under Articles 153(5)(e) or 153(5)(f) of the Credit Risk: Internal Ratings Based Approach (CRR) Part (but not assigned a risk weight of 50% under Article 153(5)(d) of the Credit Risk: Internal Ratings Based Approach (CRR) Part), the ΔRWA is zero.

8B.6 The 'capital adjustment factor' covers the following components of the PRA's capital stack: (i) Pillar 1 minimum total capital ratio; (ii) capital conservation buffer (CCoB); (iii) countercyclical capital buffer (CCyB); (iv) systemic buffers;[27] and (v) PRA buffer deductions for the CCoB and CCyB.

8B.7 The methodology used to calculate the Pillar 2A lending adjustment will be based on the underlying Pillar 1 credit risk approach to calculate the RWAs for SME and infrastructure lending, irrespective of whether a firm is bound by the output floor. The PRA will not require a firm's Pillar 2A lending adjustment to be recalculated as a result of becoming bound by the output floor.

8B.8 In line with the PRA's existing approach for setting Pillar 2 capital requirements, the Pillar 2A lending adjustments are subject to the PRA being satisfied that the firm maintains an adequate level of capital resources needed to comply with rule 2.1 of the Internal Capital Adequacy Assessment Part of the PRA Rulebook ('overall financial adequacy rule').

Reporting

8B.9 Firms that choose to submit the necessary data for eligible exposures need to complete the data template in accordance with the 'Instructions for Pillar 2 SME lending adjustment and infrastructure lending adjustment data templates' (see the appendices). Firms will need to return the data templates alongside their ICAAP submission, as part of their C-SREP.

27 The systemic buffers refer to the buffer for Global Systemically Important Institutions (G-SII) and the buffer for Other Systemically Important Institutions (O-SII), including where these are set as group risk adjustments to the PRA buffer.

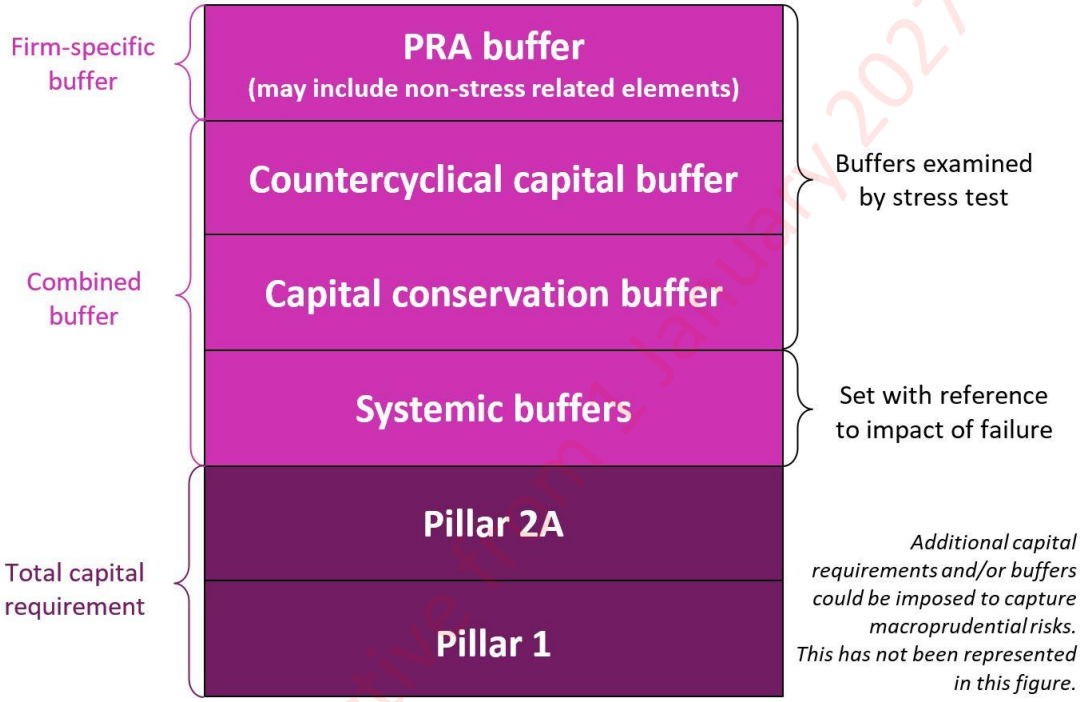
Section II: Pillar 2B

9 The PRA buffer

Purpose and objective of the PRA buffer

9.1 The PRA buffer (also referred to as Pillar 2B) is an amount of capital firms should maintain in addition to their total capital requirement[28] (TCR) and the combined buffer. The PRA buffer absorbs losses that may arise under a severe stress scenario, while avoiding duplication with the combined buffers. Together the PRA buffer, the combined buffer[29] and the TCR make up the PRA's capital framework as illustrated by the capital stack in Figure 2.

Figure 2 The capital stack



9.2 Firms should maintain capital to meet their TCR (regulatory minimum) at all times. Firms also maintain capital in the PRA buffer and the combined buffer for use (either immediately or in the future) to withstand the impact of a severe but plausible stress.

9.3 The PRA buffer is set using three assessments:

(a) the 'stress impact' – an assessment of the amount of capital firms should maintain to withstand a severe stress scenario;

(b) the 'risk management and governance assessment' – an assessment of whether a firm has significant risk management and governance (RMG) weaknesses; and

(c) 'supervisory judgment' – an assessment of any other relevant information to inform

28 Total capital requirements is the sum of Pillar 1 capital requirements plus Pillar 2A capital requirements.
29 The combined buffer comprises the Capital Conservation Buffer (CCoB), the Countercyclical Buffer (CCyB), the buffer for global systemically important institutions (G-SIIs) and (for ring-fenced banks and the largest building societies) the other systemically important institutions buffer (O-SII buffer).

adjustments to the PRA buffer in order to protect the safety and soundness of firms.

9.4 All components of the PRA buffer including RMG should be met by CET1 capital.

9.5 The PRA considers that all buffers in the capital framework, including the PRA buffer, can be used as required in times of stress. When this happens, the PRA will be content for firms to rebuild their buffers over a reasonable period of time. In exercising its judgement on what constitutes a reasonable time to rebuild buffers drawn down in stress, the PRA will take into account the amount by which the buffer has been used and the expected duration of the stress. It will consider any firm-specific drivers of the use of the buffer, in the context of current and forecast macroeconomic and financial conditions. There is no expectation on firms to maintain additional amounts of capital to avoid being within the PRA buffer in the event of a stress. More detail on the PRA's response to firms using buffers can be found in SS31/15.[30]

Setting the PRA buffer

9.6 The frequency of assessment of the PRA buffer is aligned to a firm's SREP cycle; annually for major UK firms, and every two to four years for other firms. The PRA may reassess the PRA buffer more frequently when a firm's circumstances change. For example, a change in business model or strategy, a material change in a firm's risk profile, or when RMG weaknesses are either identified or resolved.

9.7 Together the combined buffer and PRA buffer (the components relating to the stress impact) aim to ensure firms' capital is at a level to withstand the impact of a suitably severe stress. The PRA buffer captures firm-specific risks and is set with reference to a firm's hurdle rate. The risk-weighted CET1 hurdle rate is the level of CET1 capital firms are expected to maintain throughout the economic cycle and in a severe but plausible stress. The scenario is severe but plausible, and is common to all firms. The Bank and PRA jointly publish benchmarks for the appropriate severity of the scenario firms should consider.

9.8 For all firms not participating in the Bank Capital Stress Test, the hurdle rate is equal to total capital requirements (TCR). For firms participating in the Bank Capital Stress Test, the hurdle rate is set out in the guidance published on the Bank's website.[31]

9.9 Firms subject to leverage requirements will also be subject to a hurdle rate based on the Tier 1 leverage measure. Refer to the Bank's website[32] for the applicable hurdle rate.

9.10 TCR refers to the minimum requirement applicable to all tiers of capital. CET1 capital may be required to cover any shortfalls in AT1 or T2 capital, including those projected under the stress scenario, before it can count towards the buffers or considered excess CET1 capital.

9.11 Where a buffer[33] for an entity established outside the UK exceeds that entity's share[34] of the buffer applicable at the consolidated group level to cover the same risk, the difference will generally

30 The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP): https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internal-capital-adequacy-assessment-process-and-supervisory-review-ss.

31 The hurdle rate reflects the level of capital firms are expected to maintain in a stress. This is specific to each stress test. Firms participating in the Bank Capital Stress Test should refer to the guidance for each test: https://www.bankofengland.co.uk/stress-testing.

32 https://www.bankofengland.co.uk/stress-testing.

33 In this context, buffer refers to capital that overseas authorities expect firms to hold in addition to minimum capital, and which is intended to be able to be drawn down in periods of stress.

34 An entity's share of a particular consolidated group buffer can be determined by multiplying that consolidated group buffer by the proportion of the consolidated group's Pillar 1 RWAs that are attributable to that entity. The consolidated group's RWAs that are attributable to an entity is calculated as the entity's Pillar 1 RWAs, calculated on the same basis as the group RWAs, minus the risk-weighted exposures of that entity to other group entities.

be reflected in the setting of the consolidated group's PRA buffer to reflect the associated group risk at the consolidated group level. The PRA would generally not reflect such a difference in the consolidated group PRA buffer where the underlying risk of the credit institution established outside the United Kingdom is otherwise mitigated in the consolidated group requirements.

9.12 Where a particular buffer applicable on a sub-consolidated basis for the RFB sub-group is higher than the RFB sub-group's share[35] of the corresponding buffer on a consolidated basis, the difference will generally be considered in the setting of the consolidated group's PRA buffer. This is to reflect the associated RFB group risk at the consolidated group level.

The stress impact

9.13 The PRA carries out an assessment of firms' ICAAP stress testing as part of the SREP.[36] For the largest and most systemic UK firms this is supplemented by the periodic concurrent stress testing, in particular the Bank Capital Stress Test.[37]

9.14 The assessment considers the credibility and reasonableness of firms' projected stress results and the underlying assumptions on which the stress projections are build. The assessment focusses on the areas where the stress scenario adversely impacts firms' capital positions (ie reducing capital resources and increasing capital requirements), the nature and severity of the scenario on which the stress results are based and the reasonableness of mitigating actions firms propose to mitigate the impact of the stress.

9.15 Firms' assumptions, choice of scenario and stress projections are analysed and compared against the PRA's own internal models, peer benchmarks and information submitted in their ICAAPs. Where the PRA has concerns around the credibility of firms' stress results, adjustments will be made to the results or to the PRA buffer.

Stress scenario

9.16 The Bank publishes the stress scenario that major UK firms should consider. These are used in the Bank Capital Stress Test's exercise.

9.17 For firms that are not part of this Bank Capital Stress Test, the PRA regularly publishes scenarios to serve as a guide when designing their own scenarios for ICAAPs.[38] These scenarios provide a benchmark for the severity and nature of stress scenarios, to be considered, to ensure consistent assessments across firms.[39]

9.18 The assessment of firms' stress testing includes an analysis of the severity of the stress scenario considered by firms for the purposes of calculating the PRA buffer and the reasonableness of the

35 The RFB sub-group's share of a particular consolidated group buffer can be determined by multiplying that consolidated group buffer by the proportion of the consolidated group's Pillar 1 RWAs that are attributable to the RFB sub-group. The consolidated group's RWAs that are attributable to the RFB sub-group is calculated as the RFB sub-group's Pillar 1 RWAs (calculated on a sub-consolidated basis) minus the risk-weighted exposures of the RFB sub-group to group entities that are not members of the RFB sub-group.

36 Stress testing and scenario analysis requirements are set out in Chapter 12 of the Internal Capital Adequacy Assessment Part of the PRA Rulebook and in Chapter 3 of the SS31/15 The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP): https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internal-capital-adequacy-assessment-process-and-supervisory-review-ss.

37 The Bank of England's approach to stress testing the UK banking system sets out how the PRA will use stress testing to inform the calibration of capital buffers, including the Bank Capital Stress Test and other types of concurrent exercises: https://www.bankofengland.co.uk/stress-testing/2024/boes-approach-to stress-testing-the-uk-banking-system.

38 https://www.bankofengland.co.uk/stress-testing.

39 The PRA may also ask firms to run additional sensitivity analyses, the purpose of which will be to explore the impact on portfolios and/or regions, which are not covered in the PRA's published scenarios or the firms' idiosyncratic scenarios. The results of these sensitivity tests may be used to adjust the assessment of the stress impact.

stressed projections of the associated economic/market indicators that are part of the firm's scenario expansion.

Capital resources in stress testing

9.19 Capital resources are expected to reduce in a stress scenario driven by reduced income and lower profitability, as a result of increased losses, and adverse movements in capital deductions.

9.20 The assessment of stressed capital resources includes an analysis of firms' income and impairment projections, the reasonableness of the balance sheet assumptions under stress, the stressed projections of potential misconduct costs beyond those already paid or provided for, (if relevant for an individual firm) and the credibility of the projections of stressed capital resources.

Capital requirements in stress testing

9.21 In a stress, capital requirements are expected to change as a result of changes in balance sheets and a deteriorating economic environment. Pillar 2A covers a range of risks not addressed under Pillar 1 (eg concentration risk, IRRBB) or not adequately addressed under Pillar 1 (eg operational risk). While Pillar 2A is typically expressed as a share of RWAs, the nature of some of these risks (eg pension deficit risk) is not related to RWAs and may evolve differently from RWAs in stressed conditions.

9.22 To reflect the evolution of the Pillar 2A requirements in a stress the PRA scales each of the Pillar 2A risk components with a suitable metric considered to be an underlying driver (or closely related to an underlying driver) of the particular risk type (see Table E). For example, Pillar 2A requirements for credit risk will scale with changes in credit RWAs rather than total RWAs.

9.23 These scaling bases do not reflect the way the PRA sets Pillar 2A requirements. Rather, they provide a simple way to ensure Pillar 2A requirements in the stress test reflect more closely the probable impact of the stress on the risks captured in Pillar 2A.

Table E – Pillar 2A scaling bases[40]

Risk type	Scaling base
Operational risk[41]	Leverage exposure measure
Pension risk	No scaling – remains a fixed add-on
Interest rate risk in the banking book (IRRBB)	Leverage exposure measure
Credit concentration risk	Pillar 1 credit RWAs
Market and counterparty credit risk[42]	Pillar 1 market risk RWAs
Credit risk	Pillar 1 credit RWAs
RFB group risk	No scaling – remains a fixed add-on
Other risks	As appropriate

Management actions

9.24 The PRA recognises management actions that firms could and would realistically take to mitigate the impact of the stress scenario. Guidance on management actions is provided in SS31/15. Additional expectations on management actions for the major UK firms participating in the Bank Capital Stress Test's are published on the Bank's website.[43]

40 Table E covers the material risks captured by Pillar 2A requirements for the firms participating in the Bank Capital Stress Test. For other risks, the PRA will consider the best scaling base to apply while maintaining the simplicity of the calculation.
41 Including information technology risk.
42 The Pillar 2A requirement for counterparty credit risk typically relates to the market risk aspect of counterparty credit risk. The credit risk component would typically be captured in credit concentration risk requirements.
43 https://www.bankofengland.co.uk/stress-testing.

9.25 When assessing the credibility of the management actions, the PRA will consider the following:

(a) the credibility of the actions in the hypothetical stressed market conditions;

(b) any effects management actions could have on firms' reputation with its counterparties, investors and customers;

(c) the main risks associated with executing these actions;

(d) the time required to implement actions and for these to take effect; and

(e) whether or not a firm has a proven track record of executing management actions or similar actions.

9.26 The firms participating in the Bank Capital Stress Test's are expected to meet the projected demand for credit from UK households and businesses in the stress. This may limit the management actions recognised by the PRA in this context.

9.27 The credibility of capital related management actions such as the issuance, redemption and amortisation of additional Tier 1 (AT1) and Tier 2 capital instruments will be considered against the planned capital exercises in firms' baseline projections. The feasibility, timing and pricing of the issuances and redemptions in the stress scenario will be considered.

Overlaps with the combined buffer

9.28 Together the CCoB and the CCyB aim to ensure the banking system as a whole has sufficient capital to absorb system-wide losses that could occur in stress. The CCoB establishes a basic level of capacity across the system to absorb losses. The CCyB aims to ensure that the banking system is able to withstand the stress throughout the cycle without restricting essential services, such as the supply of credit.

9.29 The PRA buffer aims to ensure that firms can meet their TCR in a severe but plausible stress. A portion of the amount of capital firm need to meet their TCR in stress is therefore already captured by the CCoB and CCyB. To avoid double counting between the buffers, the component of the PRA buffer that relates to the impact of the stress is calculated as the excess amount of capital required over and above the CCoB and relevant CCyB to withstand a severe but plausible stress.

9.30 The PRA considers there to be no overlap between the systemic buffers and the other buffers.

9.31 Changes in the CCyB will generally be additive to firms' existing PRA buffer. For example, if the FPC increases the CCyB rate by 0.25% to reflect the risk environment, the PRA buffer does not mechanically change.

Stylised example

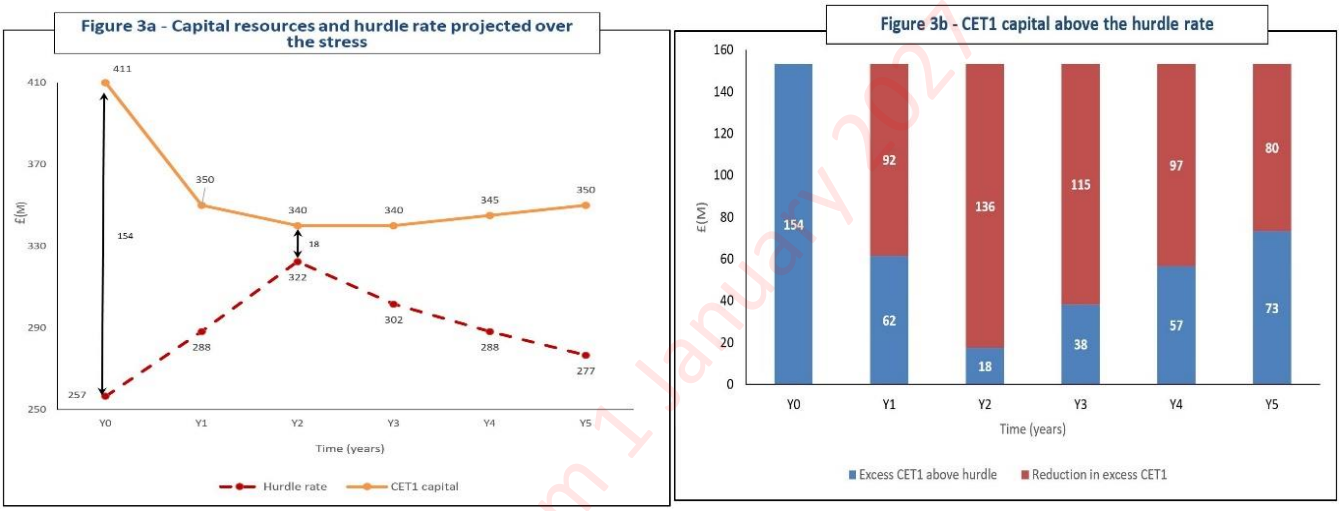
9.32 Figure 3 below presents a stylised example[44] to illustrate the key steps to calculate the PRA buffer. The results from the stress test inform the amount of CET1 capital needed to maintain a firm's capital levels above the hurdle rate in a severe but plausible stress. Figure 3a shows the projected CET1 capital resources and the risk weighted CET1 hurdle rate for a hypothetical firm in a stress scenario. At each reporting point, the excess CET1 capital above the hurdle rate is calculated

44 This is a stylised example to show the mechanics of the stress impact assessment for a firm not subject to the Tier 1 leverage hurdle rate. It does not represent all considerations taken into account for the assessment. The illustrative example assumes the firm does not breach the hurdle rate and has excess CET1 throughout the stress. The cases of a projected CET1 shortfall is likely to increase the PRA buffer calculation.

(blue bars in figure 3b). The total amount of CET1 capital the firm is expected to hold is set to equal the largest reduction in excess CET1 capital. In this example, this is equivalent to the reduction in CET1 in year 2 (£136m, red bar in Figure 3b), when the stress impact on the firm's capital is the greatest from the starting position (red bars in Figure 3b). The PRA buffer is set as the amount of CET1 needed to remain above the hurdle rate in stress that is not covered by the CCoB and the CCyB.

9.33 Assume the CCoB is £94m (2.5% of £3778m – the starting RWAs), and CCyB is set at £19m (0.5% of £3778 RWAs). The amount of CET1 capital depletion not covered by the CCoB and the CCyB is the PRA buffer, i.e. £136m minus £94m minus £19m = £23m (0.6% of £3778m RWAs). As the firm has excess capital resources to meet the CCoB, CCyB and the PRA buffer, based on this example, the firm will not need to raise capital to meet the PRA buffer.

Figure 3 Calculation of the PRA buffer – Illustrative example



The risk management and governance assessment (RMG)

9.34 Where the PRA assesses a firm's RMG to be significantly weak, it may also set the PRA buffer to cover the risks posed by those weaknesses until they are addressed. This will generally be calibrated in the form of a scalar applied to the amount of CET1 required to meet the TCR. The scalar could be up to 40% of the total CET1 TCR (variable).

9.35 Depending on the severity of the weaknesses identified and the proposed remediation actions, the PRA may allow the firm time to address the identified weaknesses before applying a scalar. In these circumstances, the PRA may give the firm an indicative figure for the size of the scalar – often referred to as a 'suspended scalar'. If a scalar is applied, the amount may vary from the indicative figure as it will be based on the facts at the time of application.

9.36 If an RMG scalar is included in the PRA buffer, RMG weaknesses identified in specific risk categories would not ordinarily be reflected in Pillar 2A capital requirements for those categories.[45] Once the identified weaknesses have been remedied, the scalar should be removed. If new weaknesses emerge that are not adequately addressed by the scalar or if previous remedial action taken by the firm has led to its removal a new scalar may be applied.

9.37 To ensure consistency, RMG scalar decisions will be subject to a peer review process within the PRA.

45 An exception might be if the risk were only partially addressed by the imposition of a scalar.

Overall supervisory judgement

9.38 While supervisory judgement may be applied at all levels of the assessment process, a number of specific areas are outlined below. The PRA may use any appropriate information to inform adjustments to firms' PRA buffer.

Group risk

9.39 The PRA's assessment of the total amount of the PRA buffer at consolidated group level for group risk will be informed by the amount by which any buffer applicable on an entity established outside the United Kingdom exceeds that entity's share of the buffer applicable at the consolidated group level to cover the same risk.[46] [47]

9.40 The PRA's assessment of the total amount of the PRA buffer applicable to the consolidated group will be informed by:

(a) for systemically important institutions, the amount by which any other systemically important institutions buffer (O-SII buffer) exceeds the RFB sub-group's share of any buffer for global systemic importance (the G-SII buffer) at the consolidated group level. If the G-SII buffer is zero, RFB group risk will be informed by the full amount of any O-SII buffer, taking account of the RFB sub-group's size relative to the consolidated group; and

(b) the amount by which any other buffer (such as the PRA buffer and including the RMG scalar) applicable to the RFB sub-group is higher than its share of the corresponding buffer for the consolidated group.

Impact of projections under the base case

9.41 Firms are expected to be able to meet their combined buffer[48] and PRA buffer under the base case. Where a firm's CET1 capital falls short of meeting the PRA buffer in the base case, the PRA's response will depend on the situation, but will most likely include a request for a revised capital plan to improve its stress resilience.

Post-balance sheet adjustments

9.42 The PRA buffer calculation is dependent on the firms' balance sheet used to complete the ICAAP. At the time the PRA buffer is set the firms' balance sheet may have materially changed, eg disposals and/or acquisitions. Where this has occurred adjustments will be made ensuring capital requirements remain consistent with a firm's balance sheet risks.

Weaknesses in stress testing processes and data quality

9.43 Supervisors consider the adequacy of a firm's stress testing processes, the quality of its data submissions and the effectiveness of its model risk management practices. Where shortcomings and deficiencies are identified, the PRA may apply adjustments to specific stress results or set a higher PRA buffer to gain more comfort in a firm's stress results. Enhanced supervision may also be considered in instances of serious or persistent failings.

Other factors

9.44 The PRA expects firms to hold a larger buffer or strengthen their capital position where necessary based on other factors. These include, but are not limited to: the firm's leverage ratio;

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46 For example, when making this assessment, the PRA may consider the extent to which any other systemically important institution (O-SII) buffer exceeds the O-SII's share of any group-wide global systemically important institution (G-SII) buffer, after accounting for the effect of risks that net off on consolidation.

47 The PRA would not reflect such a difference in the consolidated group PRA buffer where the underlying risk of the entity established outside the United Kingdom is otherwise mitigated in the consolidated group requirements.

48 This would include the CCoB, the CCyB and systemic buffers, if any.

Tier 1 and total capital ratios; risks associated with double leverage; and the extent to which potentially significant risks are not captured fully as part of the stress test.

New entrants and expanding smaller banks

9.45 The PRA's expectations for Pillar 2B of new and growing banks are set out in the SS3/21 'Non-systemic UK banks: The PRA's approach to new and growing banks'.[49]

Reporting

9.46 The scope and intensity of the PRA's assessment is proportionate to the nature, scale, size, and complexity of the firms and is reflected in the granularity of the stress test data firms are required to submit. The Stress Test Data Framework (STDF) contains the data templates for the larger UK firms participating in the Bank Capital Stress Test.

9.47 All firms with total assets equal to or greater than £5 billion, at the relevant level of consolidation used as the basis of their ICAAP, must report the data in the stress testing Pillar 2 data item (PRA111) in accordance with Reporting Pillar 2. Firms are required to submit the data with their ICAAP submissions. Firms with total assets less than £5 billion may be requested by supervisors to complete PRA111 on a case-by-case basis. The information in PRA111 includes information on firms' base and stress scenario projections used in the ICAAP. PRA111 is aligned to the STDF used in the Bank Capital Stress Test with reduced granularity.

49 https://www.bankofengland.co.uk/prudential-regulation/publication/2021/april/new-and-growing-banks-ss.

Appendices

1	Instructions for Pillar 2 SME lending adjustment and infrastructure lending adjustment data templates available at https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/statement-of-policy/2025/instructions-non-sddt-regime.pdf
2	Data templates for Pillar 2 SME lending adjustment and infrastructure lending adjustment available at https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/statement-of-policy/2025/template-non-sddt-regime.xlsx