Bank of England PRA

The PRA's methodologies for setting Pillar 2 capital for Small Domestic Deposit Takers (SDDTs)

Comparison Document | Statement of Policy

September 2024



The PRA has completed this comparison document on a best-efforts basis, to show the broad way in which the policy that applies currently to firms that are eligible to be SDDTs would change as a result of the proposals in CP7/24. This document does not fully represent the proposed policy. The full policy proposal can be found in The PRA's methodologies for setting Pillar 2 capital for Small Domestic Deposit Takers (SDDTs).

1Introduction

- 1.1 This Statement of Policy is relevant to PRA regulated banks, building societies, and consolidation entities the meet the criteria to become a Small Domestic Deposit Taker (SDDT) or SDDT consolidation entity. It 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. SDDTs. For these firms, it replaces PRA Statement of Policy 'The PRA's methodologies for setting Pillar 2 capital'. For ease of reading, any references in relation to an SDDT hereafter in this statement should be treated as applicable to both an SDDT and an SDDT consolidation entity, unless stated otherwise.
- 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, market risk, counterparty credit risk and group risk, including RFB group risk.
- 1.3 Section II: Pillar 2B provides information on the purpose of the PRA buffer, Single Capital Buffer for SDDTs and how it is determined and how it relates to the CRD buffers. Section II also provides details on the PRA's approach to tackling weak governance and risk management for SDDTs 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 Annex provides a history of updates to this Statement of Policy.

<u>2 https://www.bankofengland.co.uk/prudential-regulation/publication/2015/the-pras-methodologies-for-setting-pillar-2-capital.</u>

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 an SDDT's Pillar 2A capital requirement 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 SDDTs' Pillar 1 capital requirements for credit risk are determined in accordance with Pillar 1 of the Capital Requirements Regulation the Credit Risk: Standardised Approach (CRR). Part of the PRA Rulebook. However, the PRA believes considers that there are asset classes for which the Pillar 1 credit risk standardised approach (SA) underestimates the risk (eg zero risk-weighted sovereigns), may not capture all credit risks to which a firm is exposed and there are idiosyncratic risks faced by certain SDDTs that may require additional capital. The PRA therefore assesses credit risk as part of its Pillar 2 review of firms' SDDTs' capital adequacy.
- 2.4 The methodology detailed below is applied to all firms using the SA. It will also be applied to those portfolios capitalised using the SA by firms employing internal ratings--based (IRB) models (the methodology is therefore applied to exposures subject to a partial use exemption). Application of the methodology may be expected to be significant where a firm has higher-risk exposures on the SA and lower-risk exposures on the IRB approach, or where the SA treatment is especially favourable (eg sovereigns).
- 2.5 Where the underestimation of Pillar 1 capital is due to deficiencies in IRB models<u>In most cases</u>, 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.

Methodology for assessing Pillar 2A capital for credit risk

- 2.6 The methodology used to inform the setting of firms' Pillar 2A capital requirement for credit risk is based on a comparison of firms' SA risk weights at a portfolio level to an IRB risk-weight benchmark. The PRA has created two sets of benchmarks. One is calculated based on both unexpected and expected losses (see Table A1). The other is based on unexpected losses only (see Table A2). The latter applies to firms using International Financial Reporting Standards and for which 12 months' expected credit losses may already be covered by the SA Pillar 1 capital charge. Benchmarks have been calculated for mortgages (distinguished by loan to value (LTV) bands into fourteen categories), credit cards (both domestic and international), corporates, sovereigns and institutions (the latter two mapped to credit quality steps).
- 2.7 The PRA's use of this methodology does not imply that estimated IRB risk weights are a better reflection of underlying risk than the SA. For that reason the methodology includes

³ Firms meeting SDDT criteria would mean that they do not have any approval to use the internal ratings-based (IRB) approach.

scope for the exercise of supervisory judgement where there are acknowledged problems with IRB models (eg inadequate historical data).

- 2.8 The PRA has not calculated benchmarks for the portfolios:
- for which, whilst material for SA firms, the PRA does not have sufficient data to produce a reliable benchmark;
- that are immaterial for SA firms; and
- where the difference between the IRB and SA risk weight is small.
- 2.9 The PRA is going to collect data, as they become available, on a wider range of credit risk portfolios than in Table A1 and Table A2. When the PRA has sufficient data, the PRA may develop more formal benchmarks for those portfolios.
- 2.10 The PRA uses data collected via regulatory returns, stress testing, hypothetical portfolio exercises, data on retail exposures under the IRB approach as required by Reporting Pillar 2, 2.5 and firm-specific data requests. Each portfolio average risk weight is weighted by exposure amount. While average risk weighting gives a greater degree of importance to larger portfolios, this also reflects the fact that the associated models have been subject to a greater degree of scrutiny by the PRA.
- 2.11 The method used to inform judgement as to whether a firm should expect SDDT firms to need to hold additional capital for credit risk under Pillar 2A. But in the following cases the PRA expects that additional capital for credit risk under Pillar 2A involves a calculation on an aggregate basis. If the IRB benchmark implies that the SA for calculating the Pillar 1 capital charge overestimates the overall level of capital required for a given portfolio when compared to IRB data, the calculated excess can be offset against shortfalls in those portfolios for which the benchmark implies that the SA Pillar 1 capital charge is lower than the IRB capital charge. may be required:
- 2.12 Supervisory judgement is then used to determine the credit risk add-on, taking into account considerations such as firms' own assessments, the IRB benchmark range, the PRA's confidence in the benchmarks and supervisory knowledge of the credit risk portfolios acquired via continuous assessment.
- 2.12A Evidence indicates that IRB firms' commercial real estate (CRE) portfolios are not always comparable to SA firms' portfolios. In addition, there is significant heterogeneity between SA firms, in terms of the nature and riskiness of their CRE activities.
- 2.12B For the purpose of calculating a benchmark that reflects an appropriate level of risk sensitivity, the PRA encourages firms with material CRE exposures and which use the SA in relation to these exposures to assign, as part of their ICAAP, risk weights to these exposures in accordance with Table 1 of CRR Article 153(5) and the draft EBA technical standards for specialised lending. The PRA's assessment of risk weights for CRE exposures will be informed by the outcome of the firm's assignation of risk weights and the quality of its assessment. The PRA will take a proportionate approach where firms' CRE portfolios are not material.

2.13 Initial analysis of the data indicates that relatively few firms would be subject to an addon using the PRA's Pillar 2A credit risk methodology. Therefore, the PRA applies it on an exceptions only basis. Firms that are likely to be subject to it include, but are not limited to, those with significant exposures to sovereigns, high LTV mortgages, credit cards and CRE.

2.13A The PRA will monitor changes in IRB risk weights at least annually. Where significant changes are observed, the PRA will consider updating the IRB benchmark. This may include a partial update if this is only relevant for selected asset classes. In considering updates to the benchmark, the PRA will look to: minimise the lag between the data used to calculate the benchmark and its application to firms; and limit excessive volatility by smoothing out changes (for example, through the use of multi-year averages).

Table A1 Credit risk IRB				_
benchmark ⁴		Exposure	Lower	Upper range
		weighted average	e range	RW3
	SA RW	risk weight	RW ⁵	1777
	3/1 KVV	O'X'	1000	
Mortgages _		_		
Prime Prime		-		
0% <= LTV <50%	35.0%	5.3%	4 .5%	6.1%
50% <= LTV <60%	35.0%	9.1%	7.7%	10.5%
60% <= LTV <70%	35.0%	11.6%	9.8%	13.3%
70% <= LTV <80%	35.0%	16.6%	14.1%	19.1%
80% <= LTV < 90%	36.0%	22.4%	19.1%	25.8%
90% < = LTV < 100%	43.0%	33.3%	28.3%	38.3%
>=100%		55.6%	4 7.2%	63.9%
Buy to let	\mathcal{C}			
0% <= LTV <50%	35.0%	7.8%	6.6%	9.0%
50% <= LTV <60%	35.0%	11.3%	9.6%	13.0%
60% <= LTV <70%	35.0%	15.1%	12.8%	17.3%
70% <= LTV <80%	35.0%	19.2%	16.3%	22.1%
80% <= LTV < 90%	36.0%	39.0%	33.2%	44.9%
90% < = LTV < 100%	43.0%	64.8%	55.1%	74.5%
Personal loans	75.0%	103.6%	88.0%	119.1%
Credit cards - revolving retail				
exposures	75.0%	120.7%	102.6%	138.8%
UK credit cards	7 3.0 70	120.7 %	102.0%	
International credit cards	75.0%	175.8%	149.4%	202.2%
Corporate				
Large corporates		49.4%	4 2.0%	56.8%
Mid corporates		79.3%	67.4%	91.2%
SME		68.5%	58.2%	78.7%

Sovereign

Credit risk IRB benchmark has been updated to include the 9% upper range risk weight for Buy to let mortgages in the 0%-50% LTV. This upper range of 9% was omitted due an error first published in on 30 April 2018 (effective from 1 January 2019).

⁻The range stated is +/ 15% and is not the simple range of IRB firms' average risk weights, with the exception of the possible range for CRE which is the full range of risk weights outlined by CRR Articles 153(5) and 158(6).

	_			
High grade (CQS1)	0.0% [€]	7.1%	6.1%	8.2%
Upper medium grade (CQS2)	20.0%	9.2%	7.8%	10.6%
Lower medium grade (CQS3)	50.0%	42.0%	35.7%	48.3%
Non-investment grade	100.0%	99.8%	84.9%	114.8%
speculative (CQS4)				
Highly speculative (CQS5)	100.0%	172.1%	146.3%	197.9%
Commercial real estate				
Commercial real estate		Risk weights can	vary betwee	n 50% and
development	100%/150% ⁷	250% which repre		
		risk weights outlin	ed by CRR	Articles
		153(5) and 158(6)		
Commercial real estate	100%			
investment				
1 414 41				
Institutions		• (
High grade (CQS1)	20.0%	11.1%	9.4%	12.7%
High grade (CQS1)	20.0% 50.0%	11.1% 24.1%	9.4% 20.5%	12.7% 27.7%
High grade (CQS1) Upper medium grade (CQS2)				
High grade (CQS1)	50.0%	24.1%	20.5%	27.7%
High grade (CQS1) Upper medium grade (CQS2) Lower medium grade (CQS3)	50.0% 50.0%	24.1% 45.8%	20.5% 39.0%	27.7% 52.7%
High grade (CQS1) Upper medium grade (CQS2) Lower medium grade (CQS3) Non-investment grade speculative (CQS4)	50.0% 50.0%	24.1% 45.8%	20.5% 39.0%	27.7% 52.7%
High grade (CQS1) Upper medium grade (CQS2) Lower medium grade (CQS3) Non-investment grade	50.0% 50.0% 100.0%	24.1% 45.8% 92.2%	20.5% 39.0% 78.4%	27.7% 52.7% 106.0%

Table A2 Credit risk IRB benchmark - excluding expected losses

Expected weighted

average risk weight	(X	SA RW	Lower range RW ⁸	Upper range RW ⁶
Mortgages				
Prime				
0% <= LTV <50%	35.0%	4.5%	3.9%	5.2%
50% <= LTV <60%	35.0%	7.7%	6.6%	8.9%
60% <= LTV <70%	35.0%	9.7%	8.3%	11.2%
70% <= LTV <80%	35.0%	13.9%	11.8%	16.0%
80% <= LTV < 90%	36.0%	18.7%	15.9%	21.5%
90% < = LTV < 100%	43.0%	26.4%	22.4%	30.3%
>=100%		4 1.0%	34.9%	4 7.2%
Buy to let				
0% <= LTV <50%	35.0%	6.9%	5.8%	7.9%
50% <= LTV <60%	35.0%	9.9%	8.4%	11.4%
60% <= LTV <70%	35.0%	13.2%	11.2%	15.2%

To note, these SA risk weights would not apply to EU sovereign exposures which benefit from a 0% risk weight irrespective of their external credit rate (or CQS).

As outlined by the EBA, speculative immovable property finance (including residential development) is assigned a risk weight of 150% and other CRE is assigned a risk weight of 100%.

The range stated is +/- 15% and is not the simple range of IRB firms' average risk weights, with the exception of the possible range for CRE which is the full range of risk weights outlined by CRR Articles 153(5) and 158(6).

Page 6

Bank of England | Prudential Regulation Authority

70% <= LTV <80%	35.0%	16.6%	14.1%	19.1%
80% <= LTV < 90%	36.0%	31.0%	26.3%	35.6%
90% < = LTV < 100%	4 3.0%	47.8%	40.6%	54.9%
Personal loans	75.0%	77.5%	65.9%	89.2%
Credit cards - revolving retail				
exposures	75.0%	79.6%	67.7%	91.5%
UK credit cards				
International credit cards	75.0%	112.6%	95.7%	129.5%
Corporate				_
Large corporates		4 6.3%	39.3%	53.2%
Mid corporates		71.6%	60.9%	82.4%
SME		59.8%	50.9%	68.8%
Sovereign				
Lligh grade (COC1)	0.00/9	7.00/	00/	0.40/
High grade (CQS1)	0.0% ⁹	7.0%	6.0%	8.1%
Upper medium grade (CQS2)	20.0%	9.1%	7.7%	10.4%
Lower medium grade (CQS3)	50.0%	40.9%	34.8%	4 7.0%
Non-investment grade	100.0%	91.8%	78.0%	105.5%
speculative (CQS4)				
Highly speculative (CQS5)	100.0%	143.1%	121.6%	164.5%
Commercial real estate		~~		
Commercial real estate		Risk weights can	vary betweer	1 50% and
development	100/150% ¹⁰	250% which repr	esents the full	I range of
		risk weights outli	ned by CRR A	Articles
		153(5) and 158(6	•	
		- (-) (-)	/	

Lower medium grade (CQS3) Non-investment grade

investment Institutions

Commercial real estate

Upper medium grade (CQS2)

Highly speculative (CQS5)

Substantial risks (CQS6)

High grade (CQS1)

speculative (CQS4)

10.9%

23.7%

44.6%

87.0%

120.0%

206.5%

9.3%

20.2%

37.9%

73.9%

102.0%

175.6%

12.5%

27.3%

51.3%

100.0%

138.0%

237.5%

100%

20.0%

50.0%

50.0%

100.0%

100.0%

150.0%

2.15 The SA data cover a larger array of data than set out in Table A1 and Table A2 in order to inform the assessment of the credit portfolios reported under the SA.

Reporting
2.14 Firms using the SA for credit risk for wholesale and retail credit exposures are required by Reporting Pillar 2 2.7 and 2.8 to complete the data items for wholesale and retail credit exposures under the SA (FSA076 and FSA077).

⁹ To note, these SA risk weights would not apply to EU sovereign exposures which benefit from a 0% risk weight irrespective of their external credit rate (or CQS).

As outlined by the EBA, speculative immovable property finance (including residential development) is assigned a risk weight of 150% and other CRE is assigned a risk weight of 100%.

Page 7

2.16	To	calik	orate	the	Pillar	2 cre	edit ri	sk m	etho	dolog	y the	PR	A co	llecte	data	a. Fi	rms \	vith	
										•	• •							Pillar	2
																	_	it the	
																			data
WILLI	trici	11 11110	Hai	Uap	ital A	ucqu	acy /	15500	551110) 	10005	5 (16	// \/ \ F	') 5u	DHH5	SIUH	5.		

for new and growing banks as defined under supervisory statement (SS) 3/21 'Non-
systemic UK banks: The PRA's approach to new and growing banks;
for SDDTs predominantly engaged in unsecured retail lending; or
for SDDTs engaged in other higher risk lending (eg sub-prime lending) where additional

capital would be potentially required to ensure the SDDT is capitalised appropriately.

The PRA's methodology for assessing Pillar 2A capital for credit risk

2.5 To inform the setting of Pillar 2A capital for credit risk, the PRA uses an SDDT's own assessment of its risk profile in its Internal Capital Adequacy Assessment Process (ICAAP) (in accordance with the expectations set out in paragraphs 2.11-2.16 of the draft SDDT ICAAP SS). The PRA exercises supervisory judgement to assess whether to set a Pillar 2A credit risk add-on for an SDDT. Where an SDDT meets the criteria in paragraph 2.4, but does not provide an assessment of credit risk in its ICAAP, the PRA will assess the SDDT's Pillar 2A credit risk add-on based on sufficiently conservative assumptions to ensure capital requirements cover risks the SDDT may be exposed to.

Reporting

2.6 While SDDTs are not required to submit regulatory returns in relation to Pillar 2A credit risks, SDDTs meeting the criteria set out in paragraph 2.4 are expected (as set out in paragraph 2.11 – 2.16 of draft SDDT ICAAP SS) to detail their analysis in their ICAAP.

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 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 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, which are typically those firms with advanced market risk model permission.

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 for market risk

- 3.6 CRR Part Three, Title IV sets 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.
- 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' individual positions. The PRA's focus is on the quality of firms' methodologies, including the magnitude of market shocks applied to assess illiquidity risks. The PRA also assesses the firm's abilities to manage the risk.
- 3.8 When assessing firms' own calculations, the PRA will:
- review the completeness of illiquidity risk identification by the firm;
- assess whether the stresses designed and calibrated by the firm are appropriate to measure the risk given a 1-in-1,000 year confidence level over one year (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 (and Pillar 1 adjustments for model risks) and the Pillar 2A capital requirement is sufficient to cover losses at a 1in-1,000 year confidence level.
- 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 where the PRA identifies deficiencies in a firm's market risk systems and controls.

Reporting

- 3.10 The PRA already collects information on illiquid, concentrated and one-way positions from firms participating in the Stress Testing Data Framework (STDF) programme. This information is used for assessing the adequacy of a firm's capital under Pillar 2A.
- 3.11 Firms with significant illiquidity risk in their trading books are required by Reporting Pillar 2, 2.4 to submit data on market risk, 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.

3 4Operational risk

- 4.1—3.1 This chapter sets out the methodology the PRA uses to inform the setting of -a firm'san SDDT's Pillar 2A capital requirement for operational risk.
- 4.2 The approach applies to all PRA Category 1 firms but may be extended to other firms depending on the level of sophistication of the firm's internal operational risk management.
- 4.3 In determining whether to use the methodology described below to non-Category 1 firms, the PRA takes into account the size and complexity of a firm, as well as the sophistication of a firm's internal operational risk management. Where a firm is re-assessed as Category 1 or otherwise brought into scope, supervisors will agree a timetable for assessment that is fair, proportionate to the firm's resources and considers the sophistication of the firm's internal operational risk management. For firms not in scope, the PRA assesses operational risk on the basis of data provided by the firm, the firm's own assessment of operational risk and supervisory judgement.

Definition and scope of application

- 4.43.2 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.
- 4.5-3.3 SDDTs' Pillar 1 standardised approaches capital requirements for operational risk use gross income as a measure of risk.are determined in accordance with the operational risk part of the PRA Rulebook. The PRA considers that it continues to be important to assess operational risk as part of Pillar 2A to ensure any idiosyncratic risks that are not well captured in Pillar 1 are considered, as well as the relevance of the firm's past losses to their future operational risk. This is not ensures operational risk capital requirements are adequate given the risks SDDTs face whilst remaining flexible and risk sensitive. During the recent economic downturn, incomes dropped but operational risk exposures, in many cases, remained the same or increased. The PRA The PRA therefore assesses operational risk as part of its Pillar 2 review of firms' SDDTs' capital adequacy.
- 4.6 Conduct risk has become a recurrent and a material source of losses for many firms but the existing approaches (the Basic Indicator Approach (BIA), the Standardised Approach (TSA) and the Alternative Standardised Approach (ASA)) for calculating Pillar 1 operational risk capital do not reflect the nature and scale of recent conduct risk losses.
- 4.7 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). 11 Currently, conduct and legal losses make up the bulk of CPBP losses. In the current environment CPBP losses are considered a proxy of conduct risk losses.
- 4.8 The approach detailed below applies to firms using BIA, TSA or ASA to calculate Pillar 1 operational risk capital requirements.

Page 10

4.9 The approach does not apply to firms on the Advancement Measurement Approach (AMA) unless there are outstanding material remedial actions associated with their AMA approval. In that case additional capital may be required.

Methodology for assessing Pillar 2A capital for operational risk

- 3.4.10 The approach PRA considers non-conduct risk separately from conduct risk.
- 4.11 Where a firm's operational risk management and measurement framework are of AMA standard, add-ons for all SDDTs. To set the firm's ICAAP will be the main input into the setting of Pillar 2A capital add-on for operational risk.
- 4.12 Sizing capital for, the PRA reviews an SDDT's 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 they deliver better outcomes than relying on inadequate Pillar 1 approaches. They provide a simple, transparent and consistent way for the PRA to assess Pillar 2A operational risk across firms.
- 4.13 Conduct risk is not assessed using pre-determined distributions or scalars because of the difficulties in estimating the tail of the loss distribution. Modelling such high-impact but low-frequency losses is extremely challenging. In addition, modelling techniques for extrapolating to the tail rely on the assumption that conduct risk events are independent and recent observed conduct loss patterns show this is not the case. 12
- 4.14 Pillar 2A capital for conduct risk 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 (eg five years) are considered. As a result, the determination of additional Pillar 2A capital for conduct risk is driven predominantly by supervisory judgement.
- 4.15 The PRA uses three loss estimates, described below, to inform the setting of a firm's Pillar 2A capital requirement for non-conduct risk.
- (i) (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). The expected loss forecasts exclude 'material conduct and legal risk'. The extrapolation is dependent on the type of business undertaken by a firm, distinguishing between universal banks, predominately domestic banks and wholesale banks.
- (ii) (ii) The second estimate (C2) is based on the average of the firm's five largest losses by Basel event type (excluding CPBP) for each year. This calculation is repeated for each of the past five years, and the event type resulting in the largest capital requirement

¹² Two econometric studies provide such evidence:

 ⁽i) Gillet, Roland, Georges Hübner and Séverine Plunus (2010), 'Operational Risk and Reputation in the Financial Industry', Journal of Banking and Finance, Vol. 34, pages 224–35, argues that poor firm management creates an expectation that operational events (in general) are correlated—
 (ii) Perry, Jason and Patrick de Fontnouvelle (2005), 'Measuring Reputational Risk: The Market Reaction to Operational Loss Announcements', unpublished Working Paper, Federal Reserve Bank of Boston, finds evidence of stickiness of internal fraud events.

Page 11

(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 calibration and five-year time horizon might be reconsidered as the PRA obtains more loss data.

- (iii) (iii) The third estimate (C3) uses a firm's scenario assessments (excluding scenarios associated with CPBP event types). For each scenario, either in its ICAAP against a set of criteria and uses supervisory judgement to allocate it to 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 C3 estimate is obtained by summing the five largest annual impacts to of three 'buckets', 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 for non-conduct risk; confidence in the firm's scenario relate capital requirements to an SDDT's operational risk. The PRA takes into consideration the SDDT's business model, exposure to operational risk, management of operational risk and suitability of mitigating actions in place, and any other factors the PRA judges relevant. These will be informed by the SDDT's analysis process and internal loss data; the quality of the firm's operational risk management and measurement framework; and peer group comparisons.

4.17 The Pillar 2A capital add-on is the sum of the capital adjustment for conduct risk and non-conduct risk.

Reporting

4.18 The PRA already collects information on operational riskin its ICAAP, including scenario analysis and any historical losses from firms participating in the Stress Testing Data Framework (STDF) programme. All significant firms and firms with AMA permission must report the data contained in the operational risk Pillar 2 data items in accordance with Reporting Pillar 2, 2.3, unless those data have already been submitted as part of the STDF programme. Firms are required to submit the data with their ICAAP submissions. 'Significant firm' means a deposit-taker or PRA-designated investment firm whose size, interconnectedness, complexity and business type give it the capacity to cause significant disruption to the UK financial system (and through that to economic activity more widely) by failing or carrying on its business in an unsafe manner. The PRA may also request some firms that are not significant to report the same data and will notify the firms accordingly in advance of their submitting an ICAAP document.

and/or expected losses, as well as any insights gathered through engagement with the SDDT.

5 Counterparty credit risk

53.5 The PRA considers that bucket 1 is for SDDTs with simple business models, and/or that are not significantly exposed to operational risk, and/or that demonstrate effective management of operational risk. Bucket 2 is for SDDTs with more complex business models and/or some concerns on the exposure to and/or management of operational risk. Bucket 3 is for SDDTs with significantly complex business models and/or material concerns on the management of operational risk. The PRA may also consider bucket 3 for new SDDTs, as these firms are typically fast growing, and small firms, as these firms may be exposed to operational risk that is higher as a proportion of their assets.

3.6 Each bucket has a corresponding total operational risk capital requirement expressed as a share of the SDDT's total assets. The Pillar 2A add-on for operational risk is the requirement from the bucket minus the SDDT's Basel 3.1 operational risk Pillar 1 requirement. Once determined, the firm's Pillar 2A add-on will be converted into a percentage of RWAs, such that it is adjusted proportionately with RWAs in between the firm's Capital Supervisory Review and Evaluation Process (C-SREP). If the operational risk Pillar 1 is higher than the requirement from the bucket, the SDDT would have no Pillar 2A add-on for operational risk and would only be subject to a Pillar 1 operational risk requirement. The PRA also uses supervisory judgement to assess the Pillar 2A add-on and may vary the approach on a case-by-case basis including in being able to set an add-on above the bucket 3 level if judged to be necessary.

	ÇO "	
Bucket 1	Bucket 2	Bucket 3

Table 1: Operational risk buckets informing Pillar 2A add-on

0.3% of total assets 0.65% of total assets 1.25% of total assets

3.7 The PRA will keep these calibrations under review and adjust if there is a prudential case to do so in future.

<u>Reporting</u>

3.8 SDDTs are not required to submit regulatory returns in relation to Pillar 2A operational risk. Expectations for SDDTs in relation to including information in their ICAAP are included in SSxx/25.

4 Credit concentration risk

- 4.1 This chapter sets out the methodology the PRA uses to inform the setting of a firm's an SDDT's Pillar 2A capital requirement for counterparty credit concentration risk (CCR), including settlement risk.
- 5.2 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.

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.
- 5.4 For firms with advanced model permission,¹³ deficiencies or issues in the quantification of the capital needed to mitigate CCR adequately, or other shortcomings in the management of such risk, are addressed as part of the model approval and review process, with any additional capital requirements reflected via model multipliers or add-ons under Pillar 1 in line with Article 101 of the Capital Requirements Directive (CRD).¹⁴
- 5.5 For firms with advanced model permission, the PRA will focus on areas of risk that are not covered by internal modelling. Examples include concentration risk and settlement risk.
- 5.6 For firms without advanced model permission, or for products and counterparties not included in a CCR advanced model permission, the focus of the Pillar 2A review will be broader and cover key areas that would otherwise be assessed as part of model permission. In particular: qualitative requirements for CCR; credit concentration risk; IT sufficiency and data quality; settlement risk; collateral management; wrong-way risk; stress testing of CCR; model validation; and the limitations of non-advanced methods.

Qualitative requirements for CCR

5.7 CRR Articles 286–294 set out a number of qualitative requirements that firms must meet in order to use the advanced model for CCR. The PRA's view is that these qualitative standards should be the basis for assessing CCR risk management by all firms. The PRA assesses firms' management standards for CCR against these qualitative standards and may require firms to hold additional capital under Pillar 2 to address material deficiencies. The PRA focuses on the following areas: collateral disputes, collateral concentration and stress testing.

Relationship with concentration risk

5.8 The PRA captures CCR exposures in the firm's assessment of concentration risk, as set out in Chapter 5. The PRA addresses concentration risk by looking at single name, sectoral

^{13—}These include the Internal Model Method in CRR Article 283 and the Internal Models Approach for Master Netting Agreements in CRR Article 221.

¹⁴ See footnote (1) on page 5.

and geographical credit concentration across all exposures, including exposures and facilities across the trading and banking book.

IT sufficiency and data quality

5.9 IT and data issues can compromise the effectiveness of risk management and the calculation of capital requirements. For firms with advanced model permission, IT sufficiency and data quality are reviewed as part of an internal model application. For firms using standardised approaches, and for products not included within the scope of internal models, the Pillar 2A review focuses on IT sufficiency and data quality related to trade capture, exposure information for risk management and capital calculation. The PRA may require a firm to hold additional capital under Pillar 2A to address identified deficiencies.

Settlement risk

- 5.10 Settlement risk for transactions where the settlement or delivery date is no later than the market standard or five business days after the transaction date is not capitalised under Pillar 1.
- 5.11 For firms with advanced model permission, the risk management framework for settlement risk is reviewed as part of the advanced model application and its ongoing review.
- 5.12 Where firms do not adequately manage settlement risk arising from products outside the scope of an advanced CCR model 15 (eg through pre-deal checking, defined limit frameworks, appropriate reporting), the PRA may challenge the appropriateness of a zero capital requirement for such risk and require firms to hold additional capital under Pillar 2.
- 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).

Collateral management

- 5.14 The risk mitigation effects of collateral on derivative and repo-style transactions are incorporated into exposure calculations. However, the way in which collateral is used can give rise to additional risks. One particular area of concern is the re-use of collateral, for example when securities posted by a counterparty are re-used to collateralise an exposure with a riskier counterparty which does not segregate them. In such cases a firm may face liquidity constraints and losses if the counterparty defaults.
- 5.15 Collateral management is reviewed as part of the advanced model application and its ongoing review. For firms without advanced model permission, the PRA reviews firms' management of risks arising from collateral and may ask such firms to hold additional capital under Pillar 2 to address risks not sufficiently covered under Pillar 1.

Wrong-way risk

5.16 Other than for specific wrong-way risk, 16 the CCR capital framework assumes independence 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

⁻ This would include products (eg cash equities and cash bonds) that can result in settlement risk that does not attract counterparty credit risk.

As defined in CRR Article 291.

Page 15

between the exposure to the counterparty and the creditworthiness of that counterparty, arises in circumstances in which this assumption does not hold.

5.17 Wrong-way risk frameworks of firms with advanced model permission are reviewed as part of their Internal Model Method application process. The PRA expects firms without advanced model permission to identify, monitor, manage, mitigate and capitalise their wrong-way risk appropriately. Misidentification of wrong-way risk leads to underestimation of risks and undercapitalisation. The PRA reviews the firm's management and capitalisation of wrong-way risk in its Pillar 2 assessment and may ask firms to hold additional capital under Pillar 2A to address identified deficiencies.

Stress testing

5.18 The PRA considers stress testing to be an important complement to business-as-usual measures of CCR exposure used for risk management. Firms with advanced model permission are required to carry out comprehensive stress testing analysis for both risk management and capital adequacy assessments. The PRA expects a firm without advanced model permission, or with material proportions of business outside the scope of advanced model permission, to carry out stress testing that is commensurate with the complexity of its business. The PRA focuses on CCR stress testing capabilities in its Pillar 2 assessment and may ask firms to hold additional capital under Pillar 2A to address identified deficiencies.

Model validation

5.19 Models are used extensively in the measurement of CCR, for the modelling of risk factors, the pricing of instruments and the quantification of risk. Firms with CCR advanced model permission have their model validation functions reviewed as part of the application and review processes. The PRA expects firms without CCR advanced model permission (but still using models in their CCR management) to have a model validation function that meets the PRA's expectations. The PRA focuses on the model validation function in its Pillar 2 assessment and may ask firms to hold additional capital under Pillar 2A to address identified deficiencies.

Accuracy of the exposures and of the inputs under non-advanced methods 5.20 [Deleted]

5.21 The PRA reviews the risks that are not adequately captured by standardised approaches in its Pillar 2 assessment and may ask firms to hold additional capital under Pillar 2A to address identified deficiencies.

5.22 Inputs to the standardised approaches may come from a model or rely on prudent valuation. Where such inputs are inaccurate firms may fail to manage their exposures properly and may be under-capitalised. The PRA reviews the accuracy of those inputs to calculate Pillar 1 CCR charges and may ask firms to hold additional capital under Pillar 2A to address identified deficiencies.

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

6.4.2 Credit concentration risk (CCoR) 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 largesignificant number of exposures to specific obligors (single-name concentration) or from imperfect diversification with respect to economic sectors or geographical regions. In the context of SDDTs, credit concentration risk can be material given their small size; however, SDDTs' geographical homogeneity – as the criteria to enter the regime require them to be domestically focussed – allows for simpler calculation of their geographical concentration risk.

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, intragroup exposures¹⁷ and non-performing loans). All credit portfolios other than residential mortgage portfolios on the standardised approach are considered for geographic concentration risk.

Methodology for assessing Pillar 2A capital 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) methodology¹⁸ is 4.3 For SDDTs, the PRA sets Pillar 2A CCoR capital add-ons based on their wholesale risk-weighted assets (RWAs) ('wholesale add-on') and retail RWAs other than SA residential mortgage portfolios ('retail add-on'). The wholesale RWA add-on is calibrated to include risks from geographic, sector and singlename concentration. The retail RWA add-on only covers geographic concentration risk, as sector and single-name concentration risks tend not to apply to retail exposures, given their nature.

4.4 The PRA wholesale add-on applies to all credit RWAs excluding residential mortgages, unsecured retail, short-term liquid exposures to financial institutions and exposures in default.

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.

Gordy, M and Lütkebohmert, E (2007), 'Granularity adjustment for Basel II', Discussion Paper 01/2007, Deutsche Bundesbank.

The wholesale add-on is set at 3.5% of relevant RWAs. The PRA retail add-on applies to all remaining credit RWAs, excluding wholesale RWAs, short-term liquid exposures to financial institutions, exposures in default, and residential mortgages. The retail add-on is set at 1% of relevant RWAs. The PRA will keep these calibrations under review and adjust if there is a prudential case to do so in future.

4.5 For the purposes of calculating the 3.5% CCoR wholesale add-on, wholesale credit
RWAs will be calculated as the cell OF 02.00S – R0040C0010 minus the following six cells:
☐ OF 07.00S: retail exposures – R0010C0220,
<u>U 01 07.000. Tetali exposures – 100 1000220,</u>
☐ OF 07.00S: real estate exposures – R0330C0220,
□ OF 07 000, real actate average B0251C0220
☐ OF 07.00S: real estate exposures – R0351C0220,
☐ OF 07.00S: real estate exposures – R0352C0220,
OF 07 000 companies to institutions. D040000000
☐ OF 07.00S: exposures to institutions – R0180C0220,
☐ OF 07.00S: exposures in default – R0010C0220.
A.C. Fan the name and of calculation the AOV OCAR note: I add an install and lit DWA avail be
4.6 For the purposes of calculating the 1% CCoR retail add-on, retail credit RWAs will be
calculated as the sum of the following cells:
☐ OF 07.00S: retail exposures — R0010C0220,
D00510000
☐ OF 07.00S: real estate exposures – R0351C0220,
/X
☐ OF 07.00S: real estate exposures – R0352C0220.

- 4.7 In addition to the wholesale add-on set out above, the PRA reviews firms with particularly significant exposures in relation to single-name risk and sector concentration risk. The PRA reviews single-name concentration by considering the sum of an SDDT's large exposures, as defined in the Large Exposures (CRR) section of the PRA Rulebook (1.2b), relative to its Tier 1 capital. The PRA reviews this measure and engages with SDDTs for which the sum of their large exposures is above 300% of their Tier 1 capital. This engagement will focus on better understanding the SDDT's approach to and management of single-name concentration risk, so that the PRA can form a view on whether the SDDT is sufficiently capitalised for this risk through the RWA-based CCoR add-on. The PRA expects to monitor this through the existing large exposure reporting within COREP as required by Article 394 Reporting Requirements in the PRA Rulebook.
- 4.8 For SDDTs with significant wholesale exposures, the PRA expects any sector concentration risks from these exposures to be reflected in the design of stress scenarios, as outlined in SSXX/25. As part of the C-SREP process, the PRA will engage with SDDTs to ensure they have sufficiently explored how their sector concentrations could crystallise in a severe and plausible stress.

Page 18

4.9 The PRA maintains supervisory discretion to set 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 risk in a portfolio and suggests the necessary capital add-on range to account for single name additional capital add-on if it judges an SDDT is not prudently monitoring or managing 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). 19
- 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 (intersector 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.

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.

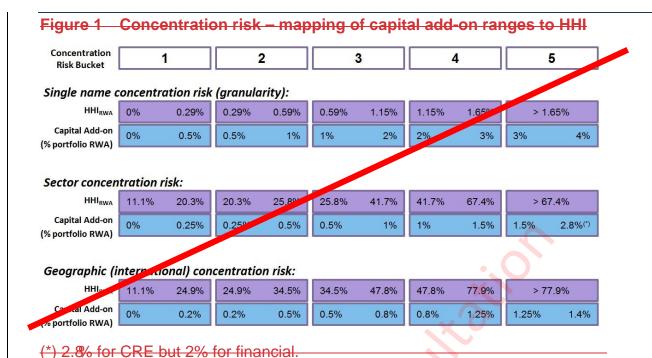


Table B Breakdown of sectors

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

Page 20

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 exercises judgement and may also consider a range of other factors, including firms' own concentration risk assessments; firms'an SDDT's 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; SDDT's business model; and any other factors not adequately captured under the quantitative assessment; and business models.

6.12 The PRA will continue to be proportionate

Reporting

- 4.10 SDDTs are not required to submit regulatory returns in its approach relation 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. Expectations for SDDTs 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 relation to including information 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, are included in SSxx/25.

75 Interest rate risk in the banking book

<u>75</u>.1 This chapter sets out the methodology the PRA uses to inform the setting of <u>a firm'san SDDT's</u> 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

75.2 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. These losses can arise from different sources:

Duration risk arises when the re-pricing of banking products (assets and liabilities) is mismatched across time buckets. FirmsSDDTs 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 firmsSDDTs 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.
- <u>5.3</u> <u>7.4 Smaller firms and firmsSDDTs</u> with less complex IRRBB exposures are subject to a standard approach, which is based on reviewing their own policy limits for duration risk, as described in paragraph 7.27. A proportionate approach is applied where a firman SDDT 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 firmSDDT to manage the associated risks.
- 5.4 Comprehensive methodology for assessing Pillar 2A capital for IRRBB for larger firms or firms with-The complexity of IRRBB varies across firms and the PRA expects SDDTs to monitor and adequately capitalise against the risks that they are exposed to. If an SDDT has more complex IRRBB exposures—7.5 Large firms or those with more complex IRRBB risk exposures are subject to a, the PRA may apply the comprehensive approach to IRRBB risk assessment in which 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 the PRA reviews duration risk, basis risk and, as necessary, 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. This would be 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 repricing 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 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. for large or more complex firms in the 'Interest rate risk in the banking book' section of PRA Statement of Policy 'The PRA's methodologies for setting Pillar 2 capital'.

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.

Page 24

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 for IRRBB for smaller firms and firmsSDDTs with less complex IRRBB exposures

7.275.5 The PRA reviews the internal policy limits used by smaller firms and firms with less complex IRRBB exposures. an SDDT. The capital requirement for IRRBB is a firm'san SDDT's risk appetite for EV sensitivity (or EVE sensitivity where a firm an SDDT does not calculate EV sensitivity) to parallel up and down shifts in interest rates across the whole yield curve. The size of the shift currently used by the PRA as a benchmark is 200 basis points. The capital requirement is subject to the PRA being comfortable with the way a firm an SDDT measures sensitivity, including any behavioural assumptions being used, and that the firm SDDT has the risk management capabilities and processes in place to manage within its risk appetite.

Basis risk

7.285.6 Under the standard methodology for SDDTs with less complex IRRBB risk exposures, the PRA does not assess Pillar 2A for basis risk. Nevertheless, the PRA expects that a bank or building societyan SDDT mitigates its basis risk by setting limits on:

its exposure to	basis risk fo	reach type	of basis	risk mismatch;	and

the sensitivity	~f :t~	mat intaka	100 0 KOLK		haaia	wio l
INA CANCIIIVIIV	W IIC	nai iniaraci		1111	Macic	LICK
	OI ILO	HEL HILEFESI	Halul	ıw	Dasis	HOIN.

Behavioural adjustments

<u>5.7</u>.729 The PRA may allow firms<u>SDDTs</u>, on a case-by-case basis, to allocate maturities based on behavioural assumptions.

Reporting

7.305.8 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 firmsSDDTs to set out additional bespoke data requirements where needed, for the IRRBB assessment. The PRA may also ask firmsSDDTs to submit internal management information relevant to IRRBB.

86 Pension obligation risk

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

Definition and scope of application 86.2 Pension obligation risk is the risk:

elements:

to a firman Spension scheotherwise);	eme (wheth	,		,		,	0
	000T '''			 . ^	1.1		

- that a firman SDDT will make payments or other contributions to, or with respect to, a pension scheme because of a moral obligation or because the firmSDDT considers that it needs to do so for some other reason.
- <u>86</u>.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.
- 86.4 A sponsoring firm is a firman SDDT 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.
- 86.5 Pension obligation risk manifests itself in different forms. The PRA's focus is on the impact that changes in value of a pension scheme could have on Common Equity Tier 1 (CET1). The accounting deficit of a firm's an SDDT's pension scheme is reflected in CET1. Under Article 36(1)(e) of the Own Funds and Eligible Liabilities (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.6 An SDDT that does not deduct its pension scheme deficit from 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 firmSDDT 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.
- 86.7 The PRA does not have a remit to protect members of defined benefit pension fund schemes against the failure of those plans. Nevertheless a firman SDDT must at all times comply with the overall financial adequacy rule. Accordingly, the PRA aims to ensure that firmsSDDTs are adequately capitalised against their defined benefit pension obligations.

Methodology for assessing Pillar 2A capital for pension obligation risk 86.8 The PRA's framework for Pillar 2A pension obligation risk capital consists of two

the firm's SDDT's own assessment of the appropriate level of Pillar 2A pension obligation

risk capital; and

- a set of stresses on the accounting basis which will be used by the PRA in assessing the adequacy of the firm'sSDDT's own assessment of the level of capital required.
- 86.9 The firm's SDDT's own assessment and the PRA stress tests on the accounting basis can be reduced by offsets and management actions, and any pension scheme deficit deducted from CET1.
- <u>86</u>.10 The PRA uses the results of two scenarios it prescribes to assess the adequacy of the <u>firm'sSDDT's</u> own assessment of the appropriate level of capital and to inform the setting of the Pillar 2A capital requirement for pension obligation risk. The higher of the two stress scenarios will form the starting point of the assessment.
- 86.11 The two scenarios applicable from 1 January 2016 are set out in Table D2.

Table <u>D2</u> PRA pension obligation risk stress scenarios (applicable from January 2016)

Per cent

	Scenario 1	Scenario 2
Fall in equity values	15	30
Fall in property values	10	20
Percentage reduction in long-term interest rates	10	15
Absolute increase in assumed inflation	0.5	0.75
Percentage change in credit spreads	-25	+25
Increase in liabilities due to a longevity stress	3	6

- 86.12 The PRA recognises that the assumptions underpinning the stress scenarios may not be appropriate for the risk profile of all pension schemes. Where the PRA believes that the risk profile of a firm'san SDDT's pension scheme deviates significantly from the assumptions underlying the published scenarios, it will use other models to inform the appropriate level of Pillar 2A pension obligation risk capital to compare against the firm's SDDT's own assessment.
- 86.13 For the purposes of the stress scenarios, the PRA expects the valuation measure of liabilities to be the same as that used for IFRS reporting. Firms'SDDTs' 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.

- <u>86</u>.14 The stress scenarios have been designed to produce an appropriate level of capital for a typical pension scheme. From time to time, it may be necessary to update the scenarios to ensure that they continue to remain appropriate. This may be done, for instance, where significant movements in market conditions mean that the scenarios produce inappropriate levels of capital or where the average risk profile of the pension schemes sponsored by PRA-regulated <u>firmsSDDTs</u> deviates from the risk profile the PRA has assumed when calibrating the stress scenarios.
- 86.15 The scenarios described in Table D2 are distinct from the multi-year firm-wide scenarios the PRA expects firmsSDDTs to develop in their ICAAP in accordance with the general stress test and scenario analysis rule in Internal Capital Adequacy Assessment 12.1 in the PRA Rulebook.
- <u>86</u>.16 The PRA reviews the scenarios on an annual basis, but only expects to make changes to them every few years. Any changes will be consulted on before being implemented.

Offsets and management actions

- 86.17 The firm's SDDT's own assessment of the appropriate level of capital and the results of the PRA stress scenarios may be reduced by eligible offsets and management actions recognised by the PRA. Offsets are reductions in a firm's an SDDT's Pillar 2A capital requirement to reflect factors present at the ICAAP effective date which would reduce the impact of a stress on the firmSDDT. Management actions are steps the firmSDDT could, and would, take when a stress occurs in order to reduce its impact.
- <u>86</u>.18 To be accepted by the PRA, offsets and management actions in relation to the PRA stress scenarios should comply with the following eligibility criteria:
 - financial performance the efficacy of offsets and management actions should not depend on assumptions as to the future financial performance of the <u>firmSDDT</u>, 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.
- <u>86</u>.19 The PRA expects <u>firmsSDDTs</u> to explain any offsets or management actions they propose. Where practical, management actions will be formulated after discussion with pension scheme trustees. 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

<u>6.20 All SDDTs</u> 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. <u>SDDTs</u> 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.

8A.27 Market risk

- 7.1 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.
- 7.2 The PRA considers that market risk is generally not relevant for SDDTs. However, the PRA expects SDDTs to adequately capitalise against risks they are exposed to. If an SDDT is exposed to market risk, the PRA may apply Pillar 2A add-ons using other methodologies, including those set out in the PRA Statement of Policy 'The PRA's methodologies for setting Pillar 2 capital', informed by the relevant information set out in the ICAAP in line with SS31/15 The Internal Capital Adequacy Assessment Process (ICAAP) and Supervisory and Evaluation Process (SREP).

8 Counterparty credit risk

- 8.1 Counterparty credit risk (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.
- 8.2 The PRA considers that applying the Pillar 1 CCR framework, including generally complicated calculations, is not proportionate given the low level of CCRs typically exhibited by SSDTs. However, the materiality of CCR varies across firms across firms, and the PRA expects SDDTs to monitor and adequately capitalise against the risks that they are exposed to. If an SDDT does not manage its CCR prudently, the PRA may expect the firm to hold additional capital under Pillar 2. This could take the form of a risk management and governance scalar, as set out in Section II of this Statement of Policy, or a Pillar 2A add-on in line with the 'Counterparty credit risk' section of PRA Statement of Policy 'The PRA's methodologies for setting Pillar 2 capital'.

9 Group Risk

9.1 Group risk, as defined in the PRA Rulebook, 20 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.2 A 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 share²¹ of the consolidated group requirements for the same risk. When making this 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 framework²² or by other means:²³ 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 undertaking²⁴ 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 subsidiaries²⁵ divided by its own common equity capital.²⁶

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

20 Internal Capital Adequacy Assessment 1.2.

- 24 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.
- 22 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 subconsolidated 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.
- 23 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.
- Section 192B FSMA.
- 25 As defined in paragraph 3.29A of SS 31/15.
- 26 As defined in paragraph 3.29A of SS 31/15.

- 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.²⁷

RFB group risk

8A.3 RFB group risk means, in relation to a consolidation group containing an RFB subgroup,²⁸ 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 9.2 The PRA considers that group risk is generally not relevant for SDDTs. However, the PRA expects SDDTs to adequately capitalise against risks they are exposed to. If an SDDT is exposed to group risk, the PRA may apply Pillar 2A add-ons using other methodologies, including those set out in the PRA Statement of Policy 'The PRA's methodologies for setting Pillar 2 capital', informed by the relevant information set out in the ICAAP in line with SS31/15.

10 Level of application

10.1 The PRA will normally set a Pillar 2A capital requirement for RFB group riskan SDDT on an individual basis. The PRA will be informed by the following, to the extent not already captured by the assessment of other elements of the additionally set Pillar 2A capital framework:

²⁷ 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).

²⁸ 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. See SS8/16 'Ring fenced bodies (RFBs)' for more detail.

- 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
 - o (ii) the RFB sub-group's share of the capital held by the consolidated group to cover credit concentration risk identified requirements for the SDDT 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;29

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 which must comply with the overall financial adequacy rule in ICAA 2.1 on a consolidated basis.

as appropriate, the amount by which the minimum capital applicable at the RFB subgroup 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.)30

Pension obligation risk

8A.6 As set out in SS8/16 'Ring-fenced bodies (RFBs)',31 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)',32 when assessing the pension obligation risk of a consolidated group containing an RFB. The PRA expects the assessment

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.

See paragraphs 2.1 and 2.2 in the Definition of Capital Part of the PRA's Rulebook.

December 2017: https://www.bankofengland.co.uk/prudential-regulation/publication/2016/ring-

January 2020: https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internalcapital-adequacy-assessment-process-and-supervisory-review-ss.

Page 32

of RFB group risk at group level to be unaffected by the assessment of the pension obligation risk for the RFB sub-group given:

- 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.³³

10.2 In many cases the PRA may decide to set Pillar 2A capital requirements on an individual basis by undertaking a detailed individual assessment, calculating the relevant Pillar 2A add-ons according to the individual SDDT's risk profile. Alternatively, the PRA may opt to set Pillar 2A capital requirements on an individual basis based on a top-down assessment of the group's TCR and then calibrate the TCR of its subsidiaries to correspond to a share of the group's TCR. This approach might be suitable if the firm can demonstrate that capital has been effectively allocated among its subsidiaries, and that the members of the group are strongly incentivised to support each other, and there are no impediments to the transfer of capital within the group. Where an SDDT has a very similar risk profile to its UK consolidation group, the PRA may decide to set Pillar 2A on an individual basis by applying the same Pillar 2A add-on rate as calculated for the UK consolidated Pillar 2A capital requirement to the individual total RWAs of the firm.

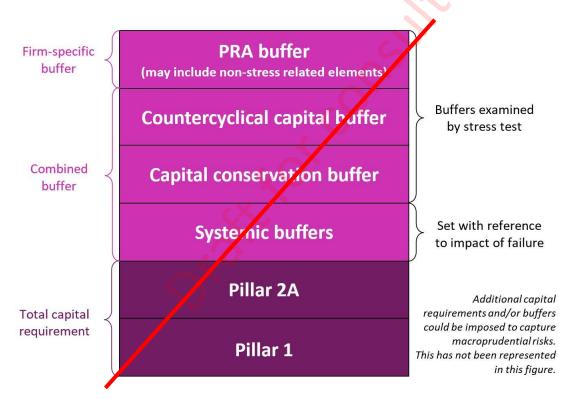
Section II: Pillar 2B methodologies

9-11 The PRA buffer Single Capital Buffer

Purpose and objective of the PRA buffer Single Capital Buffer

911.1 The PRASingle Capital Buffer (SCB) is a firm-specific buffer (also referred to as Pillar 2B) is an amount of capital firmsthat SDDTs should maintain in addition to their total capital requirement (TCR) and the combined buffer.).35 The PRA buffer absorbs SCB is designed to absorb losses that may arise under a severe but plausible stress scenario, with the aim of ensuring SDDTs continue to meet their TCR through a stress scenario, while avoiding duplication with the combined buffers. Together the PRA buffer, the combined buffer36. The SCB and the TCR make up the PRA's capital framework for SDDTs as illustrated by the capital stack in Figure 21.

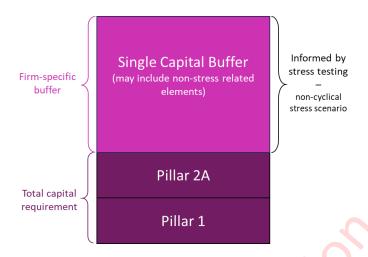




³⁴ Total capital requirements is the sum of Pillar 1 capital requirements plus Pillar 2A capital requirements.

³⁵ Total capital requirements are the sum of Pillar 1 capital requirements plus Pillar 2A capital requirements.

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).



- 11.2 FirmsSDDTs should maintain capital to meet their TCR (regulatory minimumPillar 1 plus Pillar 2A capital requirements) at all times. Firms also maintain capital in the PRA buffer and the combined buffer for but are expected and encouraged to use their SCB to manage a stress. Therefore, the use (either immediately or in the future) to withstand the impact of a severe but plausible stress. of the whole or part of the SCB would not itself be considered a breach of capital requirements or threshold conditions (TC).
- 9.3 The PRA buffer11.3 The SCB is designed as a non-cyclical buffer. The SCB for each SDDT is expected to remain relatively stable over economic and financial cycles if the SDDT's balance sheet risks and composition do not change materially. However, the SCB will vary on a firm-by-firm basis, in accordance with each SDDT's risk profile and balance sheet.
- 11.4 The SCB is set using three assessments:
 - (a) the 'stress impact'—: an assessment of the amount of capital firmsSDDTs should maintain to withstand a severe but plausible stress scenario informed by firm-run stress testing based on a non-cyclical scenario;37
 - (b) the 'risk management and governance assessment'—; an assessment of whether a firman SDDT has significant risk management and governance (RMG) weaknesses; and
 - (c) 'supervisory judgment' judgement': an assessment of any other relevant information to inform adjustments to the PRA bufferSCB in order to protect the safety and soundness of firmsSDDTs.
- 9.411.5 All components of the PRA bufferSCB including the RMG scalar 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 SS31/15.38

Setting the PRA buffer Single Capital Buffer

- 911.6 The frequency of assessment of the PRA bufferSCB is aligned to a firm's an SDDT's SREP cycle; annually for major UK firms, and is ordinarily carried out every two to three four years for other firms. The PRA may reassess the PRA bufferSCB more frequently when a firm's an SDDT's circumstances change. For example, a change in business model or strategy, a material changechanges 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 A. The stress impact 11.7 The SCB component relating to the stress impact) aim aims to ensure firms' capital is at a level to withstandthat the impact of a suitably severe stress. The PRA bufferSCB captures firm-specific risks and exposures to common and idiosyncratic risks. Accordingly, the stress test impact relies on firm-run stress testing results.
- 11.8 The stress impact is set with reference to a firm's hurdle rate. Theeach SDDT's riskweighted CET1 hurdle rate, which 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 publishes benchmarks for the appropriate severity of the scenario firms should consider.
- 9.8 For all firms not participating in the annual stress tests (AST), For SDDTs, the hurdle rate is equal to total capital requirements (TCR). For firms participating in the AST, the hurdle rate is set out in the annual guidance published on the Bank's website.39
- 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 40 for the applicable hurdle rate.
- 9.10 TCR refers to the minimum requirement the TCR (Pillar 1 and Pillar 2A) 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.

^{&#}x27;The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP)', March 2019: https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internal-capital-adequacy-assessment-process-and-supervisory-

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 AST should refer to the guidance for each test: https://www.bankofengland.co.uk/stress-testing.https://www.bankofengland.co.uk/stress-testing.

Page 36

9.11 Where a buffer⁴¹ for an entity established outside the UK exceeds that entity's share⁴² of the buffer applicable at the consolidated group level to cover the same risk, the difference will generally 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 share⁴³ 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

9.1311.9 The PRA carries out an assessment of firms'SDDT's ICAAP stress testing results as part of the SREP.44 For the major UK firms this is supplemented by the Bank's annual stress test (AST).45

9.14 The assessment considers the credibility and reasonableness of firms'each SDDT's projected stress results and the underlying assumptions on which the stress projections are buildbuilt. The assessment focuses on the areas where the stress scenario adversely impacts firms'the SDDT's capital positions (iei.e., reducing capital resources and/or increasing capital requirements), the nature and severity of the scenario on which the stress results are based, and the reasonableness of mitigatingthe actions firms proposethe SDDTs proposes to mitigate the impact of the stress.

9.15 Firms' assumptions,11.10 Assumptions underlying the stress projections, and the choice of scenario and stress projections are analysed and compared against the PRA's own internal models, peer benchmarks and information submitted in theireach SDDT's ICAAPs. Where the PRA has concerns around the credibility of firms'the SDDT's stress testing results, adjustments will be made to the results or to the PRA buffer.

41 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.

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.

https://www.bankofengland.co.uk/prudential-regulation/publication/2013/the-internal-capital-adequacy-assessment-process-and-supervisory-review-ss. for SDDTs': https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/consultation-paper/2024/july/cp724app6.pdf.

⁴² 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.

⁴⁴ Stress testing and scenario analysis requirements are set out in Chapter 12 of the Internal Capital Adequacy Assessment rules and in Chapter 3 of the <u>draft SDDT ICAAP SS -</u> '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-

⁴⁵ https://www.bankofengland.co.uk/stress-testing.

Page 37

11.11 The SCB will be set at a level no lower than 3.5% of each SDDT's RWAs, before considering the RMG assessment, even where firm-specific stress testing results⁴⁶ suggest a buffer lower than 3.5% of the SDDT's RWAs. This level would support the resilience of SDDTs, on average across SDDTs and through-the-cycle. Stress testing results of SDDTs more exposed to common and idiosyncratic risks are expected to produce numbers higher than 3.5% of RWAs.

Stress scenario

9.1611.12 The BankPRA publishes the stress scenario that major UK firms should consider. These are used in the Bank's AST exercise.

- 9.17 For firms that are not part of this AST, the PRA regularly publishes annually two non-cyclical scenarios to serve as a guide for SDDTs when designing their own scenarios for ICAAPs.47 in the context of the ICAAP stress tests.48 These scenarios provide a benchmark for the severity and nature of stress scenarios, to be considered, to ensure consistent assessments across firms.49 that the PRA considers appropriate for SDDTs.50 The PRA encourages SDDTs to consider the type, characteristics, and severity of stress that their business model is vulnerable to.
- 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 stressed projections of the associated economic/market indicators that are part of the firm's scenario expansion.
- 11.13 These stress testing scenarios are non-cyclical with a relatively constant impact across ICAAP/SREP cycles, to ensure that the size of the SCB for SDDTs is insensitive to the timing of their SREP and to the point in the economic cycle when SCB setting occurs. The scenarios are set such that as the economy moves through the economic and financial cycles, the generated stress impact remains, on average, at a constant level (if the SDDT's risk profile and balance sheet remain broadly unchanged). But the stress impact and thereby the SCB, will vary by SDDT, in accordance with their risk profile and balance sheet. It may also change in response to material changes in the structure (i.e., not related to the economic or financial cycle) of the economy or financial system that are relevant for SDDTs.

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.

9.2011.14 The assessment of stressed capital resources includes an analysis of firms'an SDDT's income and impairment projections, the reasonableness of the balance sheet

- 46 Or 6 months operating expenses for new and growing banks subject to the buffer calculation set out in SS3/21.
- 47 https://www.bankofengland.co.uk/stress-testing.

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

- 49 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.
- The PRA may also ask SDDTs 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 SDDT's idiosyncratic scenarios. The results of these sensitivity tests may be used to adjust the assessment of the stress impact.

assumptions under stress, the stressed projections of potential misconduct costs beyond those already paid or provided for, (if relevant for an individual firmSDDT) and the credibility of the projections of stressed capital resources.

Capital requirements in stress testing

9.2111.15 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 (ege.g., concentration risk, IRRBB) or not adequately addressed under Pillar 1 (ege.g., operational risk). While Pillar 2A is typically expressed as a sharepercentage of RWAs, the nature of some of these risks (ege.g., pension deficit risk) is not related to RWAs and may evolve differently from RWAs in stressed conditions.

9.2211.16 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... The PRA will consider the best scaling base to apply while maintaining the simplicity of the calculation.

9.2311.17 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 E3 – Pillar 2A scaling bases 14 relevant for SDDTs

Risk type	Scaling base
Operational risk52	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 risk53	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

9.2411.18 The PRA recognises management actions that firmsan SDDT could and would realistically take to mitigate the impact of the stress scenario. Guidance on management actions is provided in \$\frac{\text{\$S31/15. Additional expectations on management actions for the major}}{}

Table E covers the material risks captured by Pillar 2A requirements for the firms participating in the annual stress test. For other risks, the PRA will consider the best scaling base to apply while maintaining the simplicity of the calculation.

⁵² Including information technology risk.

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.

UK firms participating in the Bank's AST are published on the Bank's website.54 The draft SDDT ICAAP SS.

9.2511.19 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'the SDDT's 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 athe SDDT firm has a proven track record of executing management actions or similar actions.

9.26 The firms participating in the Bank's AST 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.

9.2711.20 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'a SDDT's 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.

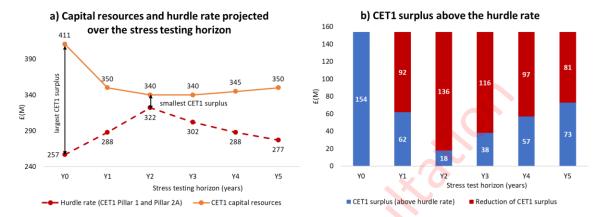
9.29 The PRA buffer aims to ensure that firms can meet their TCR in a severe but plausible stress. A portion of the amount of capital firm need to meet their TCR in stress is therefore already captured by the CCoB and CCyB. To avoid double counting between the buffers, the component of the PRA buffer 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 below2. Simplified illustration of the stress impact assessment



11.21 Figure 2 presents a stylised example to illustrate the key steps to calculate elements which the PRA buffer. The results from the stress test inform considers during the amount of CET1 capital needed to maintain a firm's capital levels above the hurdle rate in a severe but plausible stress: impact assessment.56 Figure 3a2.a shows the projected CET1 capital resources and the risk weighted CET1 hurdle rate (CET1 Pillar 1 plus Pillar 2A) over a 5-year stress testing horizon, where Y0 indicates the starting point. CET1 capital resources (orange line) reduce in a stress due to lower income and profitability and higher losses. The hurdle rate for a hypothetical firm (red dashed line), instead, increases as a result of riskier balance sheet in a stress scenario. At each reporting point, deteriorating economic environment. Figure 2.a also shows the CET1 surplus, namely the excess difference between the CET1 capital resources and the hurdle rate at each year of the stress testing horizon. Blue bars of Figure 2.b show the CET1 capital above the hurdle rate surplus, which is calculated (blue bars-maximum in figure 3b).period Y0 (£154M = £411M - £257M) and minimum in period Y2 (£18M = £340M - £322M).

11.22 The total amount of CET1 capital that the firmSDDT is expected to hold is given by the difference between the maximum CET1 capital surplus and the minimum CET1 capital surplus. The red bars in Figure 2.b shows the reduction of CET1 surplus compared to the maximum at period Y0. In this example, the capital that the SDDT is expected to hold is equal to £136M = £154M - £18M, which informs the stress test impact.

11.23 The SCB will be set to equal the largest reduction in excess CET1 capital. In this example, this is equivalent to the reduction in CET1at a level no lower than 3.5% of each

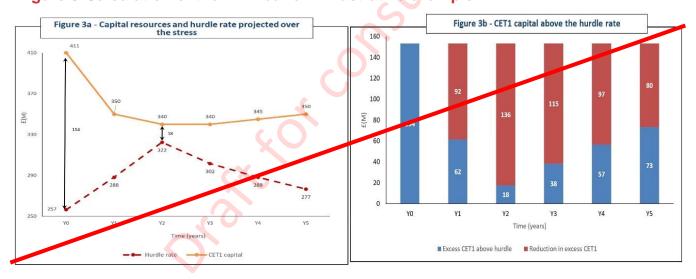
This is a stylised example to show the mechanics of the stress impact assessment for a firm not subject to the Tier 1 leverage hurdle rate. It does not represent all considerations taken into account for the assessment. The illustrative example assume's the firm does not breach the hurdle rate and has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

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

SDDT's RWAs, before considering the RMG assessment. This means that if the SDDT considered in year 2 (£136m, red barthe example has RWAs equal to £4533M, hence the stress assessment predicts a SCB 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 terms of the SDDT's RWAs of 3% = (£136M/£4533M)*100, the SCB would be set as the amount of CET1 needed to remain above the hurdle rateat 3.5%. In the other case in which the SDDT's RWAs are equal to £3400M, hence the stress impact assessment predicts a SCB in stress that is not covered by the CCoB and the CCyB.terms of the SDDT's RWAs equal to 4% = (£136M/£4533M)*100, the SCB would be set at 4%. In both cases, the Risk Management and Governance assessment and other supervisory judgments can imply changes to the final value of the SCB (which in any case cannot be set a level lower than 3.5%).

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



weaknesses before applying a scalar. In these circumstances, the PRA may give the firmSDDT 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.

9.3611.27 If an RMG scalar is included in the PRA bufferSCB, RMG weaknesses identified in specific risk categories would not ordinarily be reflected in Pillar 2A capital requirements for those categories.⁵⁷ 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 SDDT firm has led to its removal, a new scalar may be applied.

⁵⁷ An exception might be if the risk were only partially addressed by the imposition of a scalar.

9.37 To 11.28 The PRA aims to ensure consistency, across SDDTs when making the recommendation on the RMG scalar decisions will be subject to a peer review process within the PRA.

C. Overall supervisory judgement

9.38 While supervisory 11.29 Supervisory judgement may be applied at all levels of the assessment process, a. A number of specific areas are outlined below. The PRA may use any appropriate information to inform adjustments to firms' PRA bufferan SDDT's SCB.

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.⁵⁸-⁵⁹

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 11.30 SDDTs are expected to be able to meet their combined buffer and PRA buffer SCB under the base case. Where a firm's SDDT's CET1 capital falls short of meeting the PRA buffer SCB 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

9.4211.31 The PRA bufferSCB calculation is dependent on the firms'each SDDT's balance sheet used to complete the ICAAP. At the time the PRA bufferSCB is set, the firms'SDDT's balance sheet may have materially changed, ege.g., through disposals and/or acquisitions. Where this has occurred, adjustments will be made ensuring capital requirements remainthe SCB remains consistent with a firm'sthe SDDT's balance sheet risksrisk.

Weaknesses in stress testing processes and data quality

9.4311.32 Supervisors consider the adequacy of a firm's an SDDT's stress testing processes process, the quality of its data submissions and the effectiveness of its model risk management practices. Where shortcomings and deficiencies are identified, the PRA may

⁵⁸ For example, when making this assessment, the PRA may consider the extent to which any domestic systemically important bank (D-SIB) buffer exceeds the D-SIB'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.

⁵⁹ 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.

⁶⁰ This would include the CCoB, the CCyB and systemic buffers, if any.

Page 43

apply adjustments to specific stress results or set a higher PRA bufferSCB to gain more comfort in a firm'sthe SDDT's stress results. Enhanced supervision may also be considered in instances of serious or persistent failings.

Other factors

9.4411.33 The PRA expects firmsSDDTs 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; 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. Until the end

Level of 2023application

11.34 The PRA applies the SCB at each level of consolidation which applies to an SDDT or SDDT consolidation entity. Where the SDDT is not part of a group with an SDDT consolidation entity, the PRA will also assess firms' capital positions under transitional arrangements for International Financial Reporting Standards (IFRS) 9,61-set the SCB on an individual basis; and where firms are using these arrangements the SDDT is part of a group with an SDDT consolidation entity, the PRA will set the SCB both on an individual basis and on a consolidated basis. In all cases, the PRA will set the SCB at a level no lower than 3.5% of the RWAs for the entity or group, as relevant, before the RMG assessment.

New entrants and expanding smaller banks

9.45 The 11.35 When setting the SCB on an individual basis, the PRA's expectations standard approach is to undertake a full assessment on the individual basis.

11.36 Where a buffer⁶² for Pillar 2B of new and growing banks are set out an entity established outside the UK exceeds that entity's share⁶³ of the buffer applicable at the consolidated group level to cover the same risk, the difference will generally be reflected in the SS3/21 'Non-systemic UK banks:setting of the consolidated group's SCB to reflect the associated group risk at the consolidated group level. The PRA would generally not reflect such a difference in the consolidated group SCB where the underlying risk of the credit institution established outside the United Kingdom is otherwise mitigated in the consolidated group requirements.

Application of the Single Capital Buffer for subsidiaries of UK consolidation groups

11.37 Where the SDDT is part of a UK group with an SDDT consolidation entity⁶⁴ (i.e., 'an SDDT-subsidiary'), the PRA's approach to newsetting the SCB on an individual basis depends upon: the transferability of group resources; the nature and extent of integration of

^{61—}IFRS 9 was issued in July 2014 and sets out new rules for accounting for financial instruments, replacing the rules in International Accounting Standard (IAS) 39. Following endorsement for use in the EU, IFRS 9 is effective for annual periods beginning on or after 1 January 2018. The PRA's communications to firms on IFRS 9 are available on the Bank's website at https://www.bankofengland.co.uk/prudential-regulation/letter/2017/transition-disclosures-for-ifrs9-financial-instruments.

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.

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.

Scope criteria for SDDTs are defined in the PRA Rulebook - SDDT Regime - General Application |
Prudential Regulation Authority Handbook & Rulebook (prarulebook.co.uk)

Page 44

the SDDT-subsidiary; the likelihood of group support; and the significance of the entity and growing banks'.the risk profile of its business relative to the group. In all cases, whichever method the PRA uses to determine the SCB for a subsidiary, the PRA will set the individual SCB at a level no lower than 3.5%.65

- 11.38 The PRA's framework for applying the SCB to SDDT-subsidiaries takes the group-level assessment as a starting point. The PRA may set the SCB for a SDDT-subsidiary such that, when aggregated with the TCR, the total capital it is expected to hold is the same as the internal capital the SDDT-subsidiary determines in its internal capital assessment to be sufficient. Internal capital must be sufficient to cover all the risks to which the SDDT-subsidiary is exposed and to absorb potential losses from stress scenarios. Subject to supervisory judgement, this will be the case when the following conditions are met:
- on a UK consolidated basis, the SCB and TCR is the same as the internal capital the group considers to be adequate (e.g., when the SCB is set at 3.5% and the group considers regulatory requirements for capital are sufficient); and
- on an individual basis, the PRA has not identified it as having materially different capital needs in a medium-term stress, or to be exposed to materially different risks, to those of the group.
- 11.39 The PRA may also calibrate the SCB on an individual basis in this way where these conditions are not met but the SDDT-subsidiary is not considered to be material to its consolidation group, and the PRA considers financial resources to be transferable between the group entities and judges the parent to be likely to support a failing subsidiary. A subsidiary is considered not material if it comprises less than 5% of the UK consolidation group RWAs, leverage exposures and operating income.
- 11.40 Where an SDDT-subsidiary has a very similar risk profile to its consolidation group (for example, where a subsidiary comprises more than 80% of the UK consolidation group's RWAs and the rest of the group undertakes similar activities as the SDDT-subsidiary), the PRA may decide to set the SCB on an individual basis by reference to the UK consolidated SCB calculation.
- 11.41 The PRA will set the SCB according to a comprehensive individual assessment if none of the above approaches is applicable. The PRA may also set the SCB according to the full assessment process where a supervisor identifies any factors that mean the above approach is not appropriate, such as:
- material impediments to the transferability of capital within the group;
- the subsidiary is a specialist subsidiary containing a high concentration of a group's business that could lead to a negative outcome in a stress, but this concentration is offset at a group wide level;

New and growing banks under the SDDT regime are subject to an alternative approach to setting the SCB which is set out in 10.48.

⁶⁵ April 2021: https://www.bankofengland.co.uk/prudential-regulation/publication/2020/new-and-growing-banks

Page 45

there are significant weaknesses in the risk management or governance of the
subsidiary;
the subsidiary has significant weaknesses that call into question the adequacy of existing
capital requirements; or
other material supervisory concerns lead the supervisor to consider the firm's internal
capital to be insufficient.

The use of the Single Capital Buffer

- 11.42 SDDTs are expected and encouraged to use their SCB to manage a stress. The use of the SCB is not itself a breach of capital requirements or threshold conditions. The PRA does not expect or require SDDTs to finance themselves with more capital than the total of their regulatory requirements and buffers. However, SDDTs should not use the SCB in the normal course of business or enter into it as part of its base business plan.
- 11.43 In a scenario where an SDDT has identified the need to draw down on its buffer, and in line with Fundamental Rule 766, the SDDT must notify the PRA as early as possible. At a minimum, the buffer usage notification should include:
- (a) What adverse circumstances are likely to lead the SDDT to draw down its buffer;
- (b) How the buffer will be used in line with the SDDT's capital planning projections; and
- (c) A capital restoration plan setting out the identified actions and corresponding timeframe to restore the SCB.
- 11.44 An SDDT which does not meet its SCB can expect enhanced supervisory scrutiny and should prepare a capital restoration plan. If the PRA is satisfied with the rationale presented in the plan, the PRA will be content for the firm to rebuild its SCB over a reasonable period of time. In exercising its judgement on what constitutes a reasonable time to rebuild the SCB drawn down in stress, the PRA will take into account the amount of the SCB that has been used and the expected duration and drivers of the stress (whether firm specific or systemic). It will consider any firm-specific drivers of the use of the SCB, in the context of current and forecast macroeconomic and financial conditions. If the PRA is not satisfied with the capital restoration plan or with the firm's reasons for using the buffer, it may consider using its powers under section 55M of FSMA to require the firm to raise sufficient capital to meet the buffer within an appropriate timeframe.
- 11.45 SDDTs are not subject to automatic constraints on capital distributions when they use the SCB and the notification by an SDDT about its intention to draw down its SCB does not automatically trigger the use by the PRA of any of the supervisory tools at its disposal. Rather, a tool (or multiple tools) is selected on a case-by-case basis. More detail on the PRA's response to SDDTs using the SCB, including a set of scenarios and case studies illustrating the Supervisory Approach to Single Capital Buffer Usage, can be found in the Annex of this Statement of Policy.

⁶⁶ Fundamental Rule 7: A firm must deal with its regulators in an open and cooperative way and must disclose to the PRA appropriately anything relating to the firm of which the PRA would reasonably expect notice.

Page 46

Reporting

<u>911</u>.46 The scope and intensity of the PRA's assessment is proportionate to the nature, scale, size, and complexity of the <u>firmsSDDTs</u> and is reflected in the granularity of the stress test data <u>firmsthat SDDTs</u> are required to submit. The Stress Test Data Framework (STDF) contains the data templates for the larger UK firms participating in the Bank's AST.

<u>911</u>.47 All <u>firmsSDDTs</u> 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. <u>FirmsSDDTs</u> are required to submit the data with their ICAAP submissions. <u>FirmsSDDTs</u> 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 <u>firms'SDDTs'</u> base and stress scenario projections used in the ICAAP. PRA111 is aligned to the STDF used in the Bank's annual stress test with reduced granularity.

Page 47

New and growing banks under the SDDT regime

11.48 The SCB for new and growing banks⁶⁷ under the SDDT regime is not set using firms' stress testing results but as the buffer needed to cover six months of projected operating expenses.⁶⁸ As for all other SDDTs, however, it is set at a level no lower than 3.5% of each firm's RWAs at the point of the C-SREP. The PRA's capital expectations for new and growing banks under the SDDT regime are set out in the SS3/21 'Non-systemic UK banks: The PRA's approach to new and growing banks'.⁶⁹



Defined as SDDTs which have been operating for five years or less since being authorised without restrictions and yet to achieve a profit over a full year of trading.

Operating expenses are defined under SS3/21 'Non-systemic UK banks: The PRA's approach to new and growing banks' [updated link to be updated].

⁶⁹ Available at: https://www.bankofengland.co.uk/prudential-regulation/publication/2021/april/new-and-growing-banks-ss

Page 48

Annex - Supervisory Approach to Single Capital Buffer Usage

Introduction

The aim of this annex is to provide transparency on the supervisory activities that can occur following a notification of buffer usage, brought to life by hypothetical case studies.

This annex should be read in conjunction with:

☐ The PRA's approach to banking supervision;⁷⁰

☐ Section II of this Statement of Policy;

☐ [New] SS 'The Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP) for Small Domestic Deposit Takers (SDDTs)'.⁷¹

Background: Expectations around Buffer Usage and Supervision of SDDTs
SDDTs are expected and encouraged to use their capital buffers in times of stress.

The PRA does not expect firms to finance themselves with more capital than the total of their regulatory requirements and buffers. Use of the single capital buffer is not itself a breach of capital requirements or TCs, and SDDTs are expected and encouraged to use their capital buffers to manage a stress.

The PRA expects SDDTs to avoid using the SCB during the usual course of business. It is the responsibility of the Board and management to ensure that the respective SDDT has sufficient capital to manage a future stress. This is markedly separate to the capital held to meet business plans and growth targets. The PRA's reaction to a SDDT's buffer notification is not formulaic. Rather, it is centred around supervisory judgement, informed by prior engagement and supervisory activities.

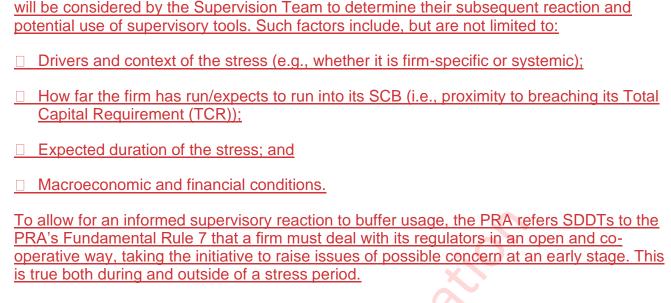
The PRA's Approach to Banking Supervision⁷³ communicates how the PRA approaches the supervision of deposit-takers, including SDDTs. During each Periodic Summary Meeting (PSM) cycle, the Supervision Team of an SDDT will engage with the firm through continued dialogue, risk assessment and supervisory activities. The supervisory activity during each cycle supports the early identification of risks to the firm's viability and will inform the Supervision Team's judgement on the firm's proximity to failure. The judgement around the proximity to failure will inform the level of supervision, and type of supervisory activities, the SDDT will be subject to.

Each scenario in which a SDDT draws down its SCB is firm-specific. A range of factors over varying time periods will contribute to the need for a SDDT to use its SCB. All such factors

⁷⁰

⁷¹ Available at: https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/consultation-paper/2024/july/cp724app6.pdf

⁷³ Available at: The Prudential Regulation Authority's approach to banking supervision (bankofengland.co.uk)



Scenarios and Case Studies

Each individual case of buffer draw down is firm-specific and caused by a range of factors.

Notification of buffer usage is not necessarily a trigger for the PRA to alter its strategy and/or use a set suite of supervisory tools.

This Annex focuses on idiosyncratic, individual firm usage of SCB. The case studies below are all hypothetical examples of idiosyncratic stresses. It is recognised that the PRA could respond differently to a system-wide stress that resulted in buffer draw down of a significant proportion of the SDDTs population. For example, the PRA used discretion to allow firms to recover buffers over a reasonable time period during the Covid-19 stress.⁷⁴

To enhance clarity and provide transparency to SDDTs, this publication groups capital buffer usage into three scenarios. The scenarios are in ascending order of severity. It is possible that a firm could fall into the bucket of one of the less severe scenarios and over some time, move to a more severe scenario or vice versa. The scenarios are illustrated by hypothetical case studies which include examples of supervisory activities and tools that could be used prior to, and in response to, notification of the buffer draw down. Note, the following case studies are purely illustrative and an SDDT experiencing a similar scenario will not necessarily be subject to the same supervisory tools and activities.

Scenario 1: High probability of restoring capital

In scenario 1 there is a high possibility that the firm restores its capital position given that it uses a relatively low proportion of the buffer, resulting in buffer usage occurring only over the short term. The supervision team has reached this judgement through prior supervisory activities and consideration of other factors and is comfortable with the firm using its buffer during the stress. Case studies A & B below explore hypothetical examples of buffer usage that could fall under scenario 1.

Case Study A

Page 50

Firm A operates a credible business model. Unexpectedly, Firm A experienced an operational risk event. Remediation was required immediately, but expenditure caused the firm to draw down its capital buffer. Firm A immediately notified the PRA of its intention to use its buffer during the stress and provided a capital restoration plan. The Supervision Team assessed the plan as credible, noting that the firm's low expected capital buffer usage created little risk of the firm breaching its TCR in the short term.

Over a short period, Firm A successfully restored its capital position above its buffer. The Supervision Team considered whether further Operational Resilience work is required over the next PSM cycle to ensure that the risks are understood and adequately mitigated.

Case Study B

Firm B is a relatively new entity that had a credible business plan upon authorisation. However, challenging market conditions made it difficult for the firm to become profitable within the forecasted period. Through regular supervisory engagement, the Supervision Team were aware of the firm's reliance on regular capital injections. However, a delay in investment resulted in Firm B drawing down its buffer.

The firm notified the PRA, setting out the rationale and capital restoration plan. Through constructive dialogue over the preceding months, the Supervision Team were already aware of the risk around delays to the capital injection and had sight of the mitigating actions identified if the plan was not successful. The Supervision Team judged the capital restoration plan to be credible and expected the capital injection to be forthcoming following the firm's discussions with potential investors.

Firm B continued with the capital raise and executed it a month later than originally planned, which restored its capital position to above the buffer. Following this, the Supervision Team adjusted the supervisory strategy to increase focus on the viability and sustainability of Firm B's business model.

Scenario 2: Medium probability of restoring capital

In Scenario 2, there is a medium probability that the firm restores its capital position. Here, either the firm runs relatively deep into its buffer or buffer usage is over a prolonged period. Case Study C below articulates this.

Case Study C

Firm C is experiencing significant business model challenges. The firm had forecast to draw down its buffer, and expected this buffer usage to persist for six months. Firm C forecasted a material capital buffer over its TCR and notified the PRA sufficiently in advance of drawing down on the buffer.

The Supervision Team viewed there to be a reasonable probability that the firm could restore its capital position out of its buffer. However, given the expected use of its buffer, Firm C recognised that it would not be appropriate to continue with the planned distribution of capital to shareholders and the management team.

This view was informed by supervisory activities conducted over the prior PSM cycle in which management and governance weaknesses were identified, exacerbated by the ongoing concerns regarding the viability and sustainability of the business model. These concerns resulted in a management and governance Section 166 being commissioned by the PRA.

Page 51

Around the time of the buffer notification, Firm C was scoping the Section 166 review and the Supervision Team requested the capital restoration plan to also be assessed as part of the report. To gain additional assurance, the Supervision Team engaged PRA to assess the executability of Firm C's latest Recovery Plan.

Whilst the Section 166 was underway, the PRA met with Firm C's Chair to discuss the business model challenges and management and governance weaknesses. The Chair proactively called a Board meeting to discuss options around altering the business strategy to preserve capital.

The Section 166 report produced actions which Firm C executed in a timely manner. The improved management team and governance framework, alongside the change in business strategy, aided the execution of the capital restoration plan within the expected timeframes.

Scenario 3: Low probability of restoring capital

Scenario 3 captures prolonged and frequent use of a large portion of the buffer. This goes against the PRA's expectations that the buffer should not be used as business-as-usual. In Scenario 3, the Supervision Team judged there to be a low probability of restoring capital. Case Study D and Case Study E set out hypothetical examples of firms that lie within Scenario 3.

Case Study D

Firm D had a high capital burn rate, which was driven by a notably large cost base. Adverse macroeconomic conditions highlighted weaknesses in the business and the firm struggled to maintain a stable capital position for several years. As a result, Firm D experienced a prolonged period of drawing down its buffer and relied upon frequent capital injections to remain just above its buffer.

Given ongoing concerns around the viability of Firm D, recent supervisory activity involved a Section 166 which assessed the executability of both its Recovery Plan and Solvent Exit Plan.

The latest buffer notification from the firm included a capital restoration plan which centred around raising capital from investors. However, the Supervision Team was informed by the firm's management team that existing shareholders were becoming reluctant to inject further capital. In addition, the Section 166 review found material gaps in the executability of both the Recovery Plan and Solvent Exit Plan.

Management and the Board recognised this and put in place restrictions on taking new deposits above the FSCS limit. Firm D's strategy was also altered to reduce lending and preserve capital. These actions increased Firm D's proximity to TCR to some extent.

However, the Supervision Team, aware of the firm's challenging history and prevailing macroeconomic headwinds, judged the curtailing of lending and deposits to be insufficient. The Supervision Team met with the Board and management team to discuss options. A decision was made by the Board to pursue the sale of some assets and liabilities to shrink its balance sheet size and simplify its business model. To mitigate the risks of failing to execute the sale of assets and liabilities, the Board put in place triggers for activation of the Solvent Exit Plan which was supported by the Supervision Team.

The sale of assets and liabilities was successful and increased the firm's proximity to TCR by enough to focus on simplifying the business model. The actions taken by management and the Board provided sufficient confidence to existing shareholders to support the firm, which restored its capital position above its buffer.

Page 52

Case Study E

Firm E ran a high-risk business model. The firm struggled to maintain a stable capital position for several years which resulted in the firm frequently seeking to raise capital from the market to avoid using buffers during the usual course of business.

Poor performance of Firm E's lending book prompted the Supervision Team to focus activities on the firm's risk management and control framework, with a credit risk review revealing material weaknesses in the control environment. Other supervisory activities have reflected this prolonged period of instability, including:

Holding frequent meetings with members of the executive team;
Requiring the firm to submit monthly updated capital forecasts;
Section 166 on the Recovery Plan and Solvent Exit Plan.

During the most recent PSM cycle, the Supervision Team observed improvements in governance and controls, which resulted in the decision to remove the capital scalar that had previously been placed on Firm E. However, the firm continued to be loss making, which was exacerbated by a deteriorating macroeconomic environment. Firm E eventually submitted another buffer breach notification which included a capital restoration plan centred around a further capital raise.

Considering the context of Firm E's ongoing struggles, the PRA did not have confidence in the latest capital restoration plan. Given the firm's high monthly expenditures and close proximity to TCR, the PRA encouraged the firm to consider ceasing new lending. Firm E agreed to this and submitted an application to implement a Voluntary Requirement (VREQ). The PRA accepted this application on the basis that this would preserve capital until a new investor is found.

However, Firm E ran deeper into its buffer without any success in attracting new investors and raising new capital. The firm remained loss making and identified that it would breach its Solvent Exit capital trigger in 3 months and TCR in 6 months. Through continued dialogue with Firm E, the Supervision Team reiterated the responsibilities of the firm's SMF holders.

Following a stalling in the firm's negotiations with a final potential investor, and the lack of another credible recovery option, the Board took the decision to execute a Solvent Exit. This is completed successfully, with Firm E repaying all deposits in the following year and remaining above TCR throughout. At the end of the solvent exit, Firm E applied for a Voluntary Variation of Permissions (VVOP) to remove its Part 4A permissions.

The case studies above included examples of types of supervisory activities and engagement prior to, and during, SCB usage. For transparency, Table A below identifies these activities which have been extracted from the hypothetical case studies. Table A is a non-exhaustive list and there are other supervisory activities and tools that could be considered for use, depending on the specific circumstances of buffer usage. There are no automatic triggers for the PRA to take a particular course of action, rather, these are taken on a case-by-case basis. This is dependent upon which activities are most appropriate to the circumstances of the firm, considering information obtained from prior supervisory engagement and other circumstantial factors

Page 53

Table A: Supervisory activities extracted from case studies

Notification Requirements

Consistent with Fundamental Rule 7, a firm should notify the PRA as early as possible where it has identified that it would need to use its buffer.

Supervisory Engagement

The level of supervisory engagement will depend upon the specific case for drawing down the buffer. It is possible that supervisory engagement may increase, with more frequent meetings.

Capital Restoration Plan

At the point where a firm identifies the need to draw down its buffer, the firm should prepare a capital restoration plan that details how it will seek to restore its capital position to meet its SCB within an expected timeframe for buffer restoration. The capital restoration plan should be shared with the PRA. The PRA will assess the executability of the plan and challenge assumptions made.

Own-Initiative Requirement (OIREQ) and Voluntary Requirements (VREQ)

The PRA can ask a firm to voluntarily apply for the imposition of a new requirement to limit activities. . Alternatively, section 55M(3) of the Financial Services and Markets Act 2000 allows the PRA to impose a new requirement on a firm, to vary a requirement that it has imposed on the firm or to cancel any such requirement other than on the application of a firm.

Own-Initiative Variation of Permissions (OIVOP) & Voluntary Variation of Permissions (VVOP)

It may be appropriate to use the PRA's own-initiative variation of permission (OIVOP) power under section 55J of FSMA to change the firm's permissions in certain circumstances, or to agree a voluntary variation of permission with the firm (VVOP).

Distribution Policy

The PRA expects firms to recognise that, generally, it would not be appropriate for a firm that is expecting to make significant use of its buffer to make distributions of capital to its shareholders or management team. However, the PRA recognises that there can be circumstances when it would be sensible for such distributions and the firms are expected to engage with their respective Supervision Team before making such decisions.

Recovery Plan

Effective recovery planning makes a firm more resilient to financial stress. A recovery plan should include recovery options for responding to a range of stress scenarios. These recovery options should help the firm to restore itself to a stable and sustainable condition.

Page 54

The Supervision Team, along with PRA specialists, will assess the executability of the recovery plan, seeking to understand which recovery options are being pursued with what expected impact on both capital levels and business viability.

Section 166 'skilled persons' reviews

Obtaining external assurance could be useful or essential at different stages of buffer usage. Circumstances in which Section 166 reports could be used include, but are not limited to:

Obtaining assurance that the Capital Restoration Plan is credible and achievable.

Obtaining assurance that the management, governance, and controls are adequate to successfully execute the capital restoration plan.

Assessing the executability of a solvent wind-down plan.

Solvent Exit

A firm should produce a 'solvent exit execution plan' if and when the execution of a solvent exit becomes a reasonable prospect75. A firm should identify and monitor indicators that would inform it about when it needs to initiate a solvent exit and whether the execution of a solvent exit is likely to be successful.