



BANK OF ENGLAND  
PRUDENTIAL REGULATION  
AUTHORITY

Consultation Paper | CP12/14

# CRD IV: updates for credit risk mitigation, credit risk, governance and market risk

June 2014

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# CRD IV: updates for credit risk mitigation, credit risk, governance and market risk

June 2014

This Consultation Paper proposes changes to the PRA's rules and supervisory statements in the areas of credit risk mitigation, credit risk, governance, and market risk.

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Responses regarding Chapters 2, 4, 5 and the non-EEA commercial property exposures in Chapter 3 are invited by 8 August, regarding the remainder of Chapter 3 (FIRB) by 30 September.

Please address any comments or enquiries to:  
[CRDIV\\_CP12\\_14@bankofengland.co.uk](mailto:CRDIV_CP12_14@bankofengland.co.uk)



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# 1 Overview

1.1 This Consultation Paper (CP) sets out proposed changes to the Prudential Regulation Authority's (PRA's) rules and supervisory statements for credit risk mitigation (CRM), credit risk, governance, and market risk. The changes are complementary to the PRA's implementation of CRD IV,<sup>(1)</sup> as set out in PS7/13.<sup>(2)</sup>

1.2 This consultation is relevant to banks, building societies and PRA-designated investment firms, henceforth 'firms'.

## Background

1.3 The PRA published rules, and accompanying supervisory statements, to implement CRD IV in December 2013. Following feedback from firms and industry, and its own assessment of how the CRD IV rules and supervisory statements are being applied by firms, the PRA is now consulting on proposals to provide further clarity.

## Summary of changes

1.4 A summary of the proposals for each policy area covered in this CP are set out below. The proposed changes to rules and supervisory statements are contained in the appendices.

## Credit risk mitigation

1.5 The PRA proposes to update the credit risk mitigation supervisory statement (SS17/13)<sup>(3)</sup> regarding expectations for firms applying for permission to use own estimates of volatility adjustments under the Financial Collateral Comprehensive Method (FCCM).

## Credit risk

1.6 Two changes to the credit risk rules and supervisory statements are being proposed, adding:

- (1) an expectation that the PRA will not grant advanced internal ratings-based (AIRB) approach permissions in relation to exposures to central governments, public sector entities, central banks and financial sector entities; and
- (2) a rule to introduce stricter criteria for the application of a 50% risk weight to certain commercial real estate exposures located in non-EEA countries.

## Governance

1.7 The PRA proposes to provide additional guidance in the Senior Management Arrangements, Systems and Controls

(SYSC)<sup>(4)</sup> sourcebook in the PRA Handbook, to clarify to firms that the PRA interprets the limits on directorships held by directors of significant firms as also applying to the individuals who manage the consolidated group, and therefore the limits could apply to certain directors in an unregulated holding company.

## Market Risk

1.8 The PRA proposes updating the market risk supervisory statement (SS13/13)<sup>(5)</sup> for firms on how to report Risks not in VaR (RNiV) requirements in FSA005.

## Statutory Obligations

1.9 In discharging its general functions of making rules and determining the general policy and principles by reference to which it performs particular functions, the PRA must, so far as reasonably possible, act in a way that advances its general objective to promote the safety and soundness of PRA-authorized persons as well as its secondary competition objective.

1.10 The purpose of CRD IV is to address problems highlighted by the crisis and so promotes the safety and soundness of firms in line with the PRA's objective. The proposals in this CP further this objective by introducing a new rule for exposures to commercial real estate in non-EEA countries, and clarifying existing rules by updating the PRA's expectations for firms' use of own estimates for volatility adjustments, use of the AIRB approach, limits on directorships in holding companies, and reporting RNiV.

1.11 The PRA does not expect these changes to give rise to any adverse effects on competition. In light of the introduction from 1 March 2014 of a statutory secondary competition objective for the PRA, it has also assessed whether the content of this consultation facilitates effective competition in markets for services provided by PRA-authorized persons in carrying on regulated activities. As these amendments contribute to the appropriate UK implementation of the EU harmonised CRD IV legislation, the PRA considers the content of this consultation as compatible with its competition objective.

(1) Comprising Regulation (EU) No. 575/2013 (the Capital Requirements Regulation — CRR) and Directive 2013/36/EU (the Capital Requirements Directive — CRD).

(2) See [www.bankofengland.co.uk/pr/Pages/publications/implemcrdiv.aspx](http://www.bankofengland.co.uk/pr/Pages/publications/implemcrdiv.aspx).

(3) See [www.bankofengland.co.uk/pr/Pages/publications/creditrisk.aspx](http://www.bankofengland.co.uk/pr/Pages/publications/creditrisk.aspx).

(4) <http://fshandbook.info/FS/html/PRA/SYSC>.

(5) See [www.bankofengland.co.uk/pr/Pages/publications/marketrisk.aspx](http://www.bankofengland.co.uk/pr/Pages/publications/marketrisk.aspx).

1.12 In making its rules and establishing its practices and procedures the PRA must have regard to the Regulatory Principles.<sup>(1)</sup> In addition, when consulting on draft rules, the PRA is also required to consider the impact on mutuals and equality and diversity. The impact of these proposals on mutual societies is not expected to be any different to that on any other type of authorised person.<sup>(2)</sup> The PRA had due regard to the equality and diversity issues that may arise from the proposals in this consultation. The conclusion reached is that the proposals do not give rise to discrimination issues and are of low relevance to the equality agenda.

1.13 Further the PRA is also required to perform an economic assessment of the impact of its policy proposals. The PRA has considered the impact of its proposals in these areas, and sets out in each chapter where these have been identified. However, where only a small number of firms will be affected, and/or the direct costs of implementation will be minimal, the PRA has not undertaken a full cost benefit analysis.

### Responding to this consultation

1.14 The proposed changes to supervisory statements on credit risk mitigation (Chapter 2), governance (Chapter 4) and market risk (Chapter 5) are to add clarity to the existing rules, and so do not place new requirements on firms. In PS7/13 the PRA indicated that it would consult on a rule to impose a stricter criterion or higher risk weight for exposures secured on commercial real-estate in non-EEA countries. Views are welcome on these proposals and the consultation for these chapters will close on 8 August 2014.

1.15 The other proposal in Chapter 3, relating to the AIRB approach, is new to firms. The consultation for this proposal will close on 30 September 2014.

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(1) FSMA 2H and 3B.

(2) Section 138K(2) of FSMA 2000.



## 2 Credit risk mitigation

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2.1 This chapter proposes amendments to the PRA supervisory statement on credit risk mitigation — SS17/13. It sets out the PRA's expectations for granting a firm permission to use its own estimates of volatility adjustments under the FCCM.

2.2 The proposed amendments are contained in Appendix 1.

### Proposals

2.3 CRR Article 225 requires that firms apply to their competent authority for permission to use their own estimates of volatility adjustments under the FCCM.

2.4 The PRA proposes to update SS17/13 with its expectation that a firm that wishes to use its own estimates of volatility adjustments shall provide the PRA with confirmation that it meets the requirements set out in CRR Articles 225(2) and 225(3), together with the information set out in SS17/3.

### Cost benefit analysis

2.5 The proposals in this chapter seek to address shortfalls in information received by the PRA relating to the quality and reliability of firms' own estimates of volatility; the internal governance processes around such estimates; and the management of collateral haircuts more generally.

2.6 For firms currently modelling own estimates, there will be additional one-off and ongoing compliance costs. These costs derive from the need for the firm to apply for permission to use its own estimates and to demonstrate compliance with the requirements of CRR Article 225 as well as the PRA's supervisory expectations of internal model use. Demonstrating compliance will require that firms provide more frequent submissions (eg annual back-testing and analyses comparing own estimates and supervisory volatility adjustments), and, in cases not involving an approved Value-at-Risk (VaR) model, firms will be required to provide documentation on model methodology and governance and to undertake an annual programme of back-testing.

## 3 Credit risk

3.1 This chapter sets out proposals for amending the following PRA rules and supervisory statements:

- Credit risk — internal ratings-based (IRB) approaches — SS11/13;<sup>(1)</sup> and
- Credit Risk 4.

### Credit risk — internal ratings-based (IRB) approaches — SS11/13

3.2 This section sets out proposed amendments to the PRA's supervisory statement on IRB approaches (SS11/13).

3.3 Following the publication of SS11/13 in December 2013, the PRA assessed the compliance of firms' wholesale loss given default (LGD) and exposure at default (EAD) models against the CRR requirements. This assessment found that due to an industry wide lack of default data, firms are not able to develop LGD or EAD models that meet the CRR requirements (ie firms cannot demonstrate compliance with CRR Article 179(1)(a) or Article 185) for exposures to central governments, public sector entities, central banks and financial sector entities.

#### Proposal

3.4 Based on the assessment referred to in paragraph 3.3, the PRA no longer expects to grant AIRB permission in relation to the following:

- exposures assigned to the central governments and central banks exposure class in accordance with CRR Article 147(2)(a);
- exposures to public sector entities as defined by CRR Article 4(1)(8); and
- exposures to financial sector entities as defined by CRR Article 4(1)(27).

3.5 The PRA proposes to update SS11/13 accordingly. Proposed amendments to the supervisory statement are contained in Appendix 2.

3.6 In connection with this policy, the PRA also proposes to replace all existing AIRB permissions for these categories of exposure with foundation internal ratings-based (FIRB) permissions by the end of June 2015. Firms currently using an AIRB approach for the categories of exposure listed above are requested to provide an estimate of the capital impact of this change by the end of the consultation period.

### Credit Risk 4 — commercial real estate exposures in non-EEA countries

3.7 This section sets out proposed amendments to the rules in Credit Risk 4 of the PRA's Rulebook, and follows the PRA's stated intention in PS7/13 to consult on a rule to impose stricter criteria and/or a higher risk weight for exposures secured on commercial real estate in non-EEA countries to align with the approach set out in PS7/13 for UK exposures.

3.8 This section proposes to introduce stricter criteria for the application of a 50% risk weight to certain commercial real estate exposures located in non-EEA countries, in accordance with CRR Articles 124 and 126.

3.9 The proposed changes to the PRA rulebook are included in Appendix 3.

#### Proposal

3.10 CRR Article 126 applies a 50% risk weight to exposures or parts of exposures which are fully and completely secured on commercial real estate where specific criteria are met. A 100% risk weight applies where those criteria are not met. The PRA is permitted to set higher risk weights or apply stricter criteria for exposures secured by commercial immovable property located in non-EEA countries based on financial stability considerations after consultation. The PRA must consult with the European Banking Authority on the adjustments to the risk weights and criteria applied.

3.11 The PRA considers a 50% risk weight inadequate to capture the risks inherent in secured commercial property lending in non-EEA countries under the conditions currently set out in the CRR due to risks to financial stability. Applying a risk weight of 50% on such terms could result in a significant increase in the extent of such lending by UK firms using the standardised approach for commercial real estate portfolios. The absence of standardised data increases the risk that the lack of transparency may amplify some of the considerations below. The PRA considers that all of the following factors, among others, give rise to financial stability concerns:

- the safety and soundness of firms lending against such exposures with a 50% risk weight may be reduced;

(1) See [www.bankofengland.co.uk/pr/Pages/publications/internalratings.aspx](http://www.bankofengland.co.uk/pr/Pages/publications/internalratings.aspx).

- large numbers of economic agents are affected by correlated property price movements;
- real estate collateral is idiosyncratic and illiquid, with high transaction costs;
- in downswings, banks may foreclose on non-performing loans and sell the security — with fire sale externalities;
- collateral plays a financial accelerator role in the financial sector; and
- feed-back loops, whereby price swings are also linked to consumer/business sentiment and may have wider macroeconomic effects.

3.12 The PRA proposes the same approach as that taken to commercial real estate exposures located in the United Kingdom. The proposed new rule 4.1A in the Credit Risk Part of the PRA Rulebook is set out in Appendix 3. It sets out the criteria the PRA proposes to apply.

3.13 The criteria require firms to assess whether annual average loss rates from lending secured by mortgages on commercial property in the relevant non-EEA country exceeded 0.5% over a representative period and to recognise

the views of the relevant supervisory authority in the local jurisdiction. These additional criteria seek to ensure that any application of a 50% risk weight would be warranted by a sufficiently low loss experience and the local supervisory authority would apply a risk weight of 50% or less in these circumstances.

### Cost-benefit analysis

3.14 Chapter 16 of PS7/13 confirmed that the cost-benefit analysis of specific policy choices was included in the individual chapters of CP5/13 and PS7/13 which discussed the relevant policy measures. The proposal contained in this chapter follows on from and extends the policy measure taken under paragraphs 7.3 and 7.4 of PS7/13. While the stricter criteria proposed would increase the capital compliance costs associated with those parts of commercial real estate exposures located in non-EEA countries that would otherwise qualify for the 50% risk weight under the standardised approach, these costs are expected to be small and outweighed by the benefit of reducing the likelihood of failure stemming from exposures to this asset class.

## 4 Governance

4.1 This chapter sets out proposals to clarify how the rules covering limits on directorships apply to directors of holding companies of significant firms, and the mechanism the PRA proposes to use to apply those limits.

4.2 Proposed guidance, to be introduced by amendments to the Senior Management Arrangements, Systems and Controls sourcebook (SYSC) is included in Appendix 4.

### Background

4.3 CRD Article 91 (3) imposed limits on the number of directorships a member of the management body of a 'significant' firm can hold. 'Significant' is measured by reference to the firm's size, internal organisation and the nature, the scope and the complexity of its activities. In practical terms, the PRA interprets the scope of 'significant' to cover Category 1 and 2 CRR firms.<sup>(1)</sup>

4.4 In addition, CRD Article 109(2) states that the obligations in Section II (arrangements, processes and mechanism of institutions), which includes Article 91, should be met on a consolidated or subconsolidated basis. CRD Article 121 also makes clear that certain requirements in Article 91 should apply to holding companies.

4.5 The CRD provisions covering the limits on directorships, including application on a consolidated basis, were transposed into the PRA Handbook<sup>(2)</sup> in PS7/13, and come into force on 1 July 2014.

4.6 Since publishing PS7/13, the PRA has received queries about how the limits should apply to directors in a holding company, so it is appropriate to clarify this in guidance.

### Proposal

4.7 CRD Article 109(2) is not intended to capture all directors in the holding company. It applies only at the level of the consolidated or subconsolidated group, so the requirements in Article 91 should apply to the individuals who manage the consolidated or subconsolidated group (in addition to all the directors of credit institutions in the group).

4.8 The draft SYSC guidance sets out the PRA's proposed guidance on identifying the management of the consolidated group. The PRA's proposed approach is to apply the same test used to determine whether a director should be approved for carrying out a 'controlled function' for which PRA approval is a

pre-requisite. The PRA believes that a director from the holding company who is sufficiently involved in the management of the consolidated group would bear sufficient influence over the regulated firm, and be sufficiently involved in decision making about its regulatory affairs, to meet the definition of a controlled function. Conversely, a director from the holding company who has not satisfied the definition of a controlled function in relation to any of the regulated entities in the group is unlikely to be part of the group's consolidated management and consequently falls outside the limit on directorships in SYSC.

### Cost-benefit analysis

4.9 The limits apply only to directors of 'significant' firms, ie Category 1 and 2 firms. Consequently, this guidance is only relevant to those holding company directors that are approved in relation to these Category 1 and 2 firms. Similar to what was set out in CP5/13, the PRA believes that these limits will not require any change to current practice in the majority of cases. In addition, directors in holding companies are able to apply for a modification to hold an additional non-executive position in the same way as other directors.

4.10 The PRA believes that applying the limits to those holding company directors who require approval by the PRA to perform a controlled function will lead to minimal additional costs for firms, as they do not need to identify a new set of individuals to whom the requirements should apply.

(1) See Chapter II of the PRA's approach to banking supervision, October 2012, available at [www.fsa.gov.uk/static/pubs/other/pra-approach-banking.pdf](http://www.fsa.gov.uk/static/pubs/other/pra-approach-banking.pdf).

(2) SYSC 4.3A.6R and SYSC 12.1.13R.

# 5 Market risk

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5.1 This chapter sets out a proposed amendment to the PRA's supervisory statement on Market Risk (SS13/13).<sup>(1)</sup> This change clarifies how firms are expected to report RNIV capital requirements in FSA005.

5.2 Proposed amendments to the supervisory statement are included in Appendix 5.

## The RNIV framework

5.3 The PRA requires firms to calculate additional own funds for the purposes of implementing CRD Article 101, which applies where a firm has permission to calculate own funds requirements for one or more risk categories of market risk under CRR Part 3 Title IV Chapter 5. It requires firms to identify any risks which are not adequately captured by those models and to hold additional own funds against those risks. The methodology for doing so is referred to as the 'RNIV framework'.

5.4 Where sufficient data is available, RNIV is calculated using a VaR and stressed Value-at-Risk (sVaR) metric for each risk factor within scope of the framework, referred to as 'stand-alone' VaR and sVaR, because no offsetting and diversification is recognised across risk factors included in the RNIV framework. If sufficient data is not available to do so, then the size of the risk should be measured using a stress test, and RNIV own funds will be at least as large as the losses arising under this stress scenario.

## Proposals

5.5 As set out in PS7/13 (Chapter 14), firms are required to report information for RNIV in FSA005 which was revised to obtain only those data that are not contained in COREP.

5.6 The PRA proposes to update SS13/13 with the clarification that firms are only required to submit FSA005 if RNIV applies to them (they have a market risk VaR model permission). The supervisory statement sets out how to complete the form in such a way that the form validates correctly and does not generate an automated error report.

## Cost-benefit analysis

5.7 The proposed changes to the supervisory statement clarify how RNIV should be reported in FSA005. This proposal does not materially change the outcome from that in SS13/13.

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(1) See [www.bankofengland.co.uk/pr/Pages/publications/marketrisk.aspx](http://www.bankofengland.co.uk/pr/Pages/publications/marketrisk.aspx).



# Appendices

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- 1 SS17/13 Credit risk mitigation

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  - 2 SS11/13 Internal ratings based approaches

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  - 3 PRA Rulebook Credit Risk Instrument 2014

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  - 4 Capital Requirements Directive (Governance) Amendment Instrument 2014

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  - 5 SS13/13 Market risk

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Supervisory Statement | SS17/13

# Credit risk mitigation

**December 2013**



## 1 Introduction

- 1.1 This supervisory statement is aimed at firms to which CRD IV applies.
- 1.2 The purpose of this statement is to provide clarification to firms of the Prudential Regulation Authority's (PRA's) expectations in respect of the recognition of credit risk mitigation in the calculation of certain risk-weighted exposure amounts.

## 2 Eligibility of protection providers under all approaches

- 2.1 The PRA does not consider there to be any financial institution of the type identified in CRR Article 119(5) ~~of the CRR~~. Accordingly, the PRA has no list of such providers to publish.

(CRR Articles 119(5) and 202)

## 3 Recognised exchanges

- 3.1 To qualify as a recognised exchange under the CRR, an exchange must be a MIFID regulated market.
- 3.2 Prior to the end of 2013, the PRA will set out the approach to be taken prior to the adoption of the ESMA implementing technical standard specifying the list of recognised exchanges.

(CRR Articles 4(1)(72), 197(4) and (8), 198(1) and 224(1))

## 4 Conditions for applying a 0% volatility adjustment under the Financial Collateral Comprehensive Method (FCCM)

- 4.1 For the purposes of repurchase transactions and securities lending or borrowing transactions, the PRA does not consider there to be any core market participants other than those entities listed in Article 227(3) of the CRR.

(CRR Article 227)

## **5 Permission to use “own estimates of volatility adjustments” under the FCCM**

- 5.1 This section sets out the PRA's expectations for granting a firm permission to use its own estimates of volatility adjustments under the FCCM, as set out in CRR Article 225.
- 5.2 Own estimates of volatility adjustments allow firms to model adverse changes in the market value of financial collateral received and posted against exposures arising from debt instruments, securities financing transactions (SFTs) and derivative transactions. Under the FCCM, firms that do not have permission to use own estimates of volatility adjustments shall apply the supervisory volatility adjustments as set out in CRR Article 224.
- 5.3 A firm that wishes to use own estimates of volatility adjustments is expected to provide the PRA with confirmation that it meets and continues to meet the

requirements set out in CRR Articles 225(2) and 225(3). It is expected that the evidence supporting this confirmation should include the following:

- For all types of financial collateral used under the FCCM, a comparison, both at point of application and at least annually thereafter, between its own estimates of volatility adjustments as calculated under CRR Article 225(2) and the supervisory volatility adjustments set out under CRR Article 224; and
- at point of application, the impact on the own funds requirements of applying its permission to use the own estimates of volatility adjustments approach as calculated under CRR Article 225(2) instead of the supervisory volatility adjustments set out under CRR Article 224.

5.4 Under CRR Article 225, the firm's own estimates of volatility adjustments are based on 99th percentile, one-tailed value-at-risk number calculated over a short liquidation period, defined per type of exposures. The internal models set out in CRR Article 363(1) are based on the same measure of risk. Therefore, if the financial collateral a firm holds is included in the scope of an internal model set out under CRR Article 363(1) that the firm has been permitted to use for market risk purposes, it may re-use the same internal model for the calculation of the firm's own estimates of volatility adjustment of this financial collateral provided that the firm complies with paragraph 5.3 above.

5.5 In any other circumstances, a firm that wishes to use the firm's own estimates of volatility adjustments is expected to provide the PRA with confirmation of its compliance with the following as evidence that the conditions of Article 225 are met:

- full documentation of the methodology used to calculate its own estimates of volatility adjustments;
- a demonstration that the unit in charge of the design and the implementation of the own estimates of volatility adjustments approach is independent from business trading units;
- an annual programme of back-testing to assess the accuracy of its own estimates of volatility adjustments. The PRA expects back-testing to be based on a comparison of the volatility adjustments generated by the firm's internal model for all the types of financial collateral used under the FCCM with their realised values over the most recent 250 business days. If the back-testing indicates that the own estimates of volatility adjustments are underestimated, a firm is expected to take the action necessary to address the inaccuracy of its model.

Supervisory Statement | SS11/13

# Internal Ratings Based approaches

**December 2013**

## 1 Introduction

- 1.1 This supervisory statement is aimed at firms to which CRD IV applies.
- 1.2 Article 143(1) of the CRR requires the Prudential Regulation Authority (PRA) to grant permission to use the Internal Ratings Based (IRB) approach where it is satisfied that the requirements of Title II Chapter 3 of the CRR are met. The purpose of this supervisory statement is to provide explanation, where appropriate, of the PRA's expectations when assessing whether firms meet those requirements, including in respect of the conservatism applied.
- 1.3 Responsibility for ensuring that internal models are appropriately conservative and are CRR compliant rests with firms themselves. The PRA stated in The PRA's approach to banking supervision that 'if a firm is to use an internal model in calculating its regulatory capital requirements, the PRA will expect the model to be appropriately conservative'.
- 1.4 Firms should be aware that where approval to use the IRB approach is subject to a joint decision under CRR Article 20, the expectations set out in this supervisory statement will be subject to discussion between the PRA and other EEA regulators regarding the joint decision.
- 1.5 Some parts of this supervisory statement will require revision in due course as a result of the development by the EBA of binding technical standards required by the CRR. The PRA expects to amend or delete these parts of this supervisory statement when those technical standards enter into force.
- 1.6 The PRA expects that this document will be revised on a periodic basis.

## 2 Application of requirements to EEA groups applying the IRB approach on a unified basis

- 2.1 The CRR provides that where the IRB approach is used on a unified basis by an EEA group, the PRA is required to permit certain IRB requirements to be met on a collective basis by members of that group. The PRA considers that where a firm is reliant upon a rating system or data provided by another member of its group it will not meet the condition that it is using the IRB approach on a unified basis unless:
  - a) the firm only does so to the extent that it is appropriate, given the nature and scale of the firm's business and portfolios and the firm's position within the group;
  - b) the integrity of the firm's systems and controls is not adversely affected;
  - c) the outsourcing of these functions meets the requirements of SYSC;<sup>1</sup> and
  - d) the abilities of the PRA and the lead regulator of the group to carry out their responsibilities under the CRR are not adversely affected.

(CRR Article 20(6))

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<sup>1</sup> Senior Management Arrangements, Systems and Controls, as contained in the PRA Handbook.

- 2.2 Prior to reliance being placed by a firm on a rating system, or data provided by another member of the group, the PRA expects the proposed arrangements to have been explicitly considered, and found to be appropriate, by the governing body of the firm.
- 2.3 If a firm uses a rating system or data provided by another group member, the PRA expects the firm's governing body to delegate those functions formally to the persons or bodies that are to carry them out.

(CRR Article 20(6))

### **3 Third country equivalence**

- 3.1 CRR Article 107(3) allows exposures to third country investment firms, third country credit institutions and/or third country clearing houses and exchanges to be treated as exposures to an institution only if the third country applies prudential and supervisory requirements to that entity that are at least equivalent to those applied in the Union. The definition of 'large financial sector entity' in CRR Article 142(1)(4) depends in part on whether the third country in question applies prudential and supervisory requirements to that entity that are at least equivalent to those applied in the Union.
- 3.2 Prior to the end of 2013, the PRA will set out the approach to be taken during 2014 in the absence of an equivalence determination by the European Commission.

### **4 Permission to use own estimates of loss given default (LGD) and exposure at default (EAD)**

4.1 The PRA has found that, due to an industry-wide lack of default data, it is not currently possible for firms to develop LGD or EAD models that meet the CRR requirements for use of own estimates of LGD and EAD for the following categories of exposures:

- a) central governments and central banks, as defined by CRR Article 147(2)(a);
- b) public sector entities, as defined by CRR Article 4 (8); and
- c) financial sector entities, as defined by CRR Article 4 (27).

4.2 The PRA does not intend to grant new permissions to use the Advanced IRB Approach (AIRB) for exposures in the above categories at this time.

(CRR Article 143(2) and 144(1))

4.3 Firms with an existing permission to use the AIRB approach for exposures in these categories should continue to apply a 45% LGD floor to each unsecured exposure in the sovereign asset class until those permissions are replaced with permissions to use the FIRB approach.

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No changes have been made to existing sections 4 to 12, apart from renumbering

...

## **13 14 Loss Given Default in IRB approaches**

### **Negative LGDs**

~~13.1~~ 14.1 The PRA expects firms to ensure that no LGD estimate is less than zero.

### **Low LGDs**

~~13.2~~ 14.2 The PRA does not expect firms to be using zero LGD estimates in cases other than where they had cash collateral supporting the exposures.

~~13.3~~ 14.3 The PRA expects firms to justify any low LGD estimates using analysis on volatility of sources of recovery, notably on collateral, and cures (as outlined below). This includes:

- a) recognising that the impact of collateral volatility on low LGDs is asymmetric as surpluses over amounts owed need to be returned to borrowers and that this effect may be more pronounced when estimating downturn rather than normal period LGDs; and
- b) recognising the costs and discount rate associated with realisations and the requirements of CRR Article 181(1)(e).

~~13.4~~ 14.4 In order to ensure that the impact of collateral volatility is taken into account, the PRA expects firms' LGD framework to include non-zero LGD floors which are not solely related to administration costs.

(CRR Article 179(1)(f))

### **Treatment of cures**

~~13.5~~ 14.5 Where firms wish to include cures in their LGD estimates, the PRA expects them to do so on a cautious basis with reference to both their current experience and how this is expected to change in downturn conditions. In particular, this involves being able to articulate clearly both the precise course of events that will allow such cures to take place and any consequences of such actions for other elements of their risk quantification. For example:

- a) Where cures are driven by the firm's own policies, we would expect firms to consider whether this is likely to result in longer realisation periods and larger forced sale discounts for those exposures that do not cure, and higher default rates on the book as a whole, relative to those that might be expected to result from a less accommodating attitude. To the extent feasible, the PRA expects cure assumptions in a downturn to be supported by relevant historical data.
- b) The PRA expects firms to be aware of and properly account for the link between cures and subsequent defaults. In particular, an earlier cure definition is, other things being equal, likely to result in a higher level of subsequent defaults.

(CRR Article 5(2))

### **Incomplete workouts**

~~13.6~~ 14.6 In order to ensure that estimates of LGDs take into account the most up to date experience, we would expect firms to take account of data in respect of relevant incomplete workouts (ie defaulted exposures for which the recovery process is still in progress, with the result that the final realised losses in respect of those exposures are not yet certain).

(CRR Article 179(1)(c))

### **LGD — sovereign floor**

~~13.7~~ — To ensure that sovereign LGD models are sufficiently conservative in view of the estimation error that may arise from the lack of data on losses to sovereigns, the PRA expects firms to apply a 45% LGD floor to each unsecured exposure in the sovereign asset class.

(CRR Articles 144(1) and 179(1)(a))

### **LGD — UK retail mortgage property sales reference point (2)**

~~13.8~~ 14.7 The PRA believes that an average reduction in property sales prices of 40% from their peak price, prior to the market downturn, forms an appropriate reference point when assessing downturn LGD for UK mortgage portfolios. This reduction captures both a fall in the value of the property due to house price deflation as well as a distressed forced sale discount.

~~13.9~~ 14.8 Where firms adjust assumed house price values within their LGD models to take account of current market conditions (for example with reference to appropriate house price indices) we recognise that realised falls in market values may be captured automatically. Firms adopting such approaches may remove observed house price falls from their downturn house price adjustment so as not to double count. The PRA expects all firms wishing to apply such an approach to seek the consent of the PRA and to be able to demonstrate that the following criteria are met:

- a) the adjustment applied to the market value decline element of a firm's LGD model is explicitly derived from the decrease in indexed property prices (ie the process is formulaic, not judgemental);
- b) the output from the adjusted model has been assessed against the 40% peak-to-trough property sales prices decrease reference point (after inclusion of a forced sale discount);
- c) a minimum 5% market value decline applies at all times in the LGD model; and
- d) the firm has set a level for reassessment of the property market price decline from its peak. For example, if a firm had initially assumed a peak-to-trough market decline of 15%, then it will have set a level of market value decline where this assumption will be reassessed.

CRR Article 181(1)(b))

## **Downturn LGDs**

~~43.10~~ 14.9 In order to ensure that their LGD estimates are oriented towards downturn conditions, the PRA expects firms to have a process through which they:

- a) identify appropriate downturn conditions for each IRB exposure class within each jurisdiction;
- b) identify adverse dependencies, if any, between default rates and recovery rates; and
- c) incorporate adverse dependencies, if identified, between default rates and recovery rates in the firm's estimates of LGD in a manner that meets the requirements relating to an economic downturn.

(CRR Article 181(1)(b))

## **Discounting cash flows**

~~43.11~~ 14.10 In order to ensure that their LGD estimates incorporate material discount effects, the PRA expects firms' methods for discounting cash flows to take account of the uncertainties associated with the receipt of recoveries with respect to a defaulted exposure, for example by adjusting cash flows to certainty equivalents or by using a discount rate that embodies an appropriate risk premium; or by a combination of the two.

~~43.12~~ 14.11 If a firm intends to use a discount rate that does not take full account of the uncertainty in recoveries, we would expect it to be able to explain how it has otherwise taken into account that uncertainty for the purposes of calculating LGDs. This can be addressed by adjusting cash flows to certainty equivalents or by using a discount rate that embodies an appropriate risk premium for defaulted assets; or by a combination of the two.

~~43.13~~ 14.12 In addition to the above measures the PRA expects firms to ensure that no discount rate used to estimate LGD is less than 9%.

(CRR Article 5(2))

## **Wholesale LGD**

~~43.14~~ 14.13 The PRA expects firms using AIRB approaches to have done the following in respect of wholesale LGD estimates:

- a) applied LGD estimates at transaction level;
- b) ensured that all LGD estimates (both downturn and non-downturn) are cautious, conservative and justifiable, given the paucity of observations. In accordance with CRR Article 179(1)(a), estimates must be derived using both historical experience and empirical evidence, and not be based purely on judgemental consideration. We expect the justification as to why the firm thinks the estimates are conservative to be documented;



- c) identified and explained at a granular level how each estimate has been derived. This should include an explanation of how internal data, external data, expert judgement or a combination of these has been used to produce the estimate;
- d) clearly documented the process for determining and reviewing estimates, and the parties involved in the process in cases where expert judgement was used;
- e) demonstrated an understanding of the impact of the economic cycle on collateral values and be able to use that understanding in deriving their downturn LGD estimates;
- f) demonstrated sufficient understanding of any external benchmarks used and identified the extent of their relevance and suitability to the extent that the firm can satisfy itself that they are fit for purpose;
- g) evidenced that they are aware of any weaknesses in their estimation process and have set standards, for example related to accuracy, that their estimates are designed to meet;
- h) demonstrated that they have sought and utilised relevant and appropriate external data, including through identifying all relevant drivers of LGD and how these will be affected by a downturn;
- i) ensured, in most cases, estimates incorporate effective discrimination on the basis of at least security type and geography. In cases where these drivers are not incorporated into LGD estimates then we would expect the firm to be able to demonstrate why they are not relevant;
- j) have put in place an on-going data collection framework to collect all relevant internal loss and exposure data required for estimating LGD and a framework to start using these data as soon as any meaningful information becomes available; and
- k) ensured it can articulate the data the firm intends to use from any industry-wide data collection exercises in which it is participating, and how the data will be used.

(CRR Section 6)

### **LGD models for low-default portfolios**

~~13.15~~ 14.14 ~~We have~~ The PRA has developed a framework for assessing the conservatism of firms' wholesale LGD models for which there are a low number of defaults. ~~The framework is set out in Appendix C and does not apply to sovereign LGD estimates which are floored at 45%. The PRA will~~ We are in the process of using use this framework to assess the calibration of firms' material models.

### **LGD models for low-default portfolios**

~~43.16~~ 14.15 In the following cases, the PRA expects firms to determine the effect of applying the framework set out in Appendix C to models which include LGD values that are based on fewer than 20 'relevant' data points (as defined in Appendix C):

- a) the model is identified for review by the PRA; or
- b) the firm submits a request for approval for a material change to its LGD model.

~~43.17~~ 14.16 In such cases firms should contact their supervisor to obtain the relevant data templates that should be populated and submitted to the PRA.

### **Unexpected loss (UL) on defaulted assets**

~~43.18~~ 14.17 The CRR is unclear in how UL should be calculated for defaulted assets. This was also the case for the BCD. The answer to transposition group question 655 on the calculation of UL for defaulted assets under the BCD referred to two approaches:

- a) the independent calculation approach; and
- b) subtraction of the best estimate of expected loss from post-default LGD.

~~43.19~~ 14.18 The PRA considers that both of the approaches set out in the CRD transposition group answer are acceptable in principle.

~~43.20~~ 14.19 Where an independent calculation approach is adopted for the calculation of unexpected loss on defaulted assets the PRA expects firms to ensure that estimates are at least equal, at a portfolio level, to a 100% risk-weight, ie 8% capital requirement on the amount outstanding net of provisions.

(CRR Article 181(1)(h))

### **Unsecured LGDs where the borrowers' assets are substantially used as collateral**

~~43.24~~ 14.20 The extent to which a borrower's assets are already given as collateral will affect the recoveries available to unsecured creditors. If the degree to which assets are pledged is substantial this will be a material driver of LGDs on such exposures. Although potentially present in all transactions, the PRA expects firms to be particularly aware of this driver in situations in which borrowing on a secured basis is the normal form of financing, leaving relatively few assets available for the unsecured debt. Specialist lending (including property), hedge funds, some SME/mid-market lending are examples of such cases.

~~43.22~~ 14.21 The PRA expects firms to take into account the effect of assets being substantially used as collateral for other obligations estimating LGDs for borrowers for which this is the case. The PRA expects firms not to use unadjusted data sets that ignore this impact, and note that it is an estimate for downturn conditions that is normally required. In the absence of relevant data to estimate this effect, conservative LGDs — potentially of 100% — are expected to be used.

(CRR Articles 171(2), 179(1)(a))

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No changes have been made to existing sections 14 to 19, or the appendices, apart from renumbering.

...

**PRA RULEBOOK CREDIT RISK INSTRUMENT 2014**

**Powers exercised**

- A. The Prudential Regulation Authority (“PRA”) makes this instrument in the exercise of the following powers and related provisions in the Financial Services and Markets Act 2000 (“the Act”):
  - (1) section 137G (the PRA’s general rules); and
  - (2) section 137T (general supplementary powers).
- B. The rule-making powers referred to above are specified for the purpose of section 138G(2) (Rule-making instruments) of the Act.

**Pre-conditions to making**

- C. In accordance with section 138J of the Act (consultation by the PRA), the PRA consulted the Financial Conduct Authority. After consulting, the PRA published a draft of proposed rules and had regard to representations made.

**PRA Rulebook Credit Risk Instrument 2014**

- D. The Credit Risk Part of the PRA Rulebook is amended in accordance with the Annex to this instrument.

**Commencement**

- E. This instrument comes into force on [DATE].

**Citation**

- F. This instrument may be cited as the PRA Rulebook Credit Risk Instrument 2014.

**By order of the Board of the Prudential Regulation Authority**  
[DATE]

## Annex

## Credit Risk

In this Annex, new text is shown underlined and deleted text is shown strikethrough.

#### 4 CRITERIA FOR CERTAIN EXPOSURES SECURED BY MORTGAGES ON COMMERCIAL IMMOVABLE PROPERTY

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4.1 For the purposes of Articles 124(2) and 126(2) of the *CRR* and in addition to the conditions set out therein, a *firm* may ~~only~~ treat *exposures* as fully and completely secured by mortgages on commercial immovable property located in the *UK* in accordance with Article 126 of the *CRR* only where annual average *losses* stemming from lending secured by mortgages on commercial property located in the *UK* did not exceed 0.5% of risk-weighted exposure amounts over a representative period. A *firm* shall calculate the *loss* level referred to in this rule on the basis of the aggregate market data for commercial property lending published by the *PRA* in accordance with Article 101(3) of the *CRR*.

4.1A For the purposes of Articles 124(2) and 126(2) of the *CRR*, a *firm* may treat an *exposure* or any part of an *exposure* that is located in a jurisdiction that is not an *EEA State* as fully and completely secured for the purposes of Article 126(1) of the *CRR* only if all of the following conditions are met:

(1) annual average *losses* stemming from lending secured by mortgages on commercial property located in that jurisdiction did not exceed 0.5% of risk-weighted exposure amounts over a representative period; where

(a) there is sufficient evidence that the data used to determine the *loss* level referred to in Credit Risk 4.1A are of the same or better quality as the data required to be published under Article 101(3) of the *CRR*; and

(b) it is reasonable to rely on such data;

(2) the risk-weight that would be applied to that *exposure* or part of an *exposure* by the relevant supervisory authority in that jurisdiction is 50% or less.

4.2 For the purposes of ~~this rule~~ Credit Risk 4.1 and 4.1A, a representative period shall be a time horizon of sufficient length and which includes a mix of good and bad years.

**[Note: Arts. 124(2) and 126(2) of the CRR]**

**CAPITAL REQUIREMENTS DIRECTIVE (GOVERNANCE) AMENDMENT  
INSTRUMENT 2014**

**Powers exercised**

- A. The Prudential Regulation Authority makes this instrument in the exercise of the following powers and related provisions in the Financial Services and Markets Act 2000 (“the Act”):
- (1) section 137G (The PRA’s general rules);
  - (2) section 137T (General supplementary powers);
- B. The rule-making powers referred to above are specified for the purpose of section 138G(2) (Rule-making instruments) of the Act.

**Pre-conditions to making**

- C. In accordance with section 138J of the Act (Consultation by the PRA), the PRA consulted the Financial Conduct Authority. After consulting, the PRA published a draft of proposed rules and had regard to representations made.

**Commencement**

- D. This instrument comes into force on [DATE].

**Amendments to the Handbook**

- E. The Senior Management Arrangements, Systems and Controls sourcebook (SYSC) is amended in accordance with the Annex to this instrument.

**Notes and Guidance**

- F. In the Annex to this instrument, the “notes” (indicated by “**Note:**”) are included for the convenience of readers but do not form part of the legislative text.
- G. The Prudential Regulation Authority gives as guidance each provision in the Annex marked with a G.

**Citation**

- H. This instrument may be cited as the Capital Requirements Directive (Governance) Amendment Instrument 2014.

**By order of the Board of the Prudential Regulation Authority**  
[DATE]

## Annex

## Amendments to the Senior Management Arrangements, Systems and Control manual (SYSC)

In this Annex, underlining indicates new text and striking through indicates deleted text, unless otherwise stated.

### 4 General organisational requirements

...

#### 4.3A CRR firms

Management body

...

4.3A.6A G The limits on directorships set out in SYSC 4.3A.6R also apply to members of the management body of the UK consolidation group or non-EEA sub group in accordance with SYSC 12.1.13R. This means that members of the management body of a non-CRR firm that is a parent financial holding company in a Member State and is a member of a UK consolidation group could be caught by the limits in SYSC 4.3A.6R (SYSC 12.1.14R). A person who requires approval under SUP 10B.6.2R or SUP 10B.6.4R because of the influence they exercise over the CRR firm should be regarded as a member of the management body of the UK consolidation group or non-EEA sub group and therefore subject to the limit on directorships in SYSC 4.3A.6R.

[Note: article 91(3) and article 109(2) of the Fourth Capital Requirements Directive]

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Supervisory Statement | SS13/13

## Market risk

**December 2013**



## 1 Introduction

- 1.1 This supervisory statement is aimed at firms to which CRD IV applies.
- 1.2 It sets out the Prudential Regulation Authority's (PRA's) expectations of firms in relation to market risk and should be considered in addition to requirements set out in CRD IV Articles 325–377, the market risk rules of the PRA Rulebook and the high-level expectations outlined in *The PRA's approach to banking supervision*.<sup>1</sup>
- 1.3 This statement details the PRA's expectations with regard to the following:
- Material deficiencies in risk capture by an institution's internal approach.
  - Standardised approach for options.
  - Netting a convertible with its underlying instrument.
  - Offsetting derivative instruments.
  - Exclusion of backtesting exceptions when determining multiplication factor addends.
  - Derivation of notional positions for standardised approaches.
  - Qualifying debt instruments.
  - Expectations relating to internal models.
  - Value-at-Risk (VaR) and stressed VaR (sVaR) calculation.
  - Requirement to have an internal incremental risk charge (IRC) model.
  - Annual SIF attestation of market risk internal models.

## 2 Material deficiencies in risk capture by an institution's internal approach

- 2.1 This section sets out the PRA's requirements for the calculation of additional own funds for the purposes of implementing CRD Article 101, which applies where a firm has permission to calculate own funds requirements for one or more categories of market risk under CRR Part 3 Title IV Chapter 5. It requires firms to identify any risks which are not adequately captured by those models and to hold additional own funds against those risks. The methodology for the identification of those risks and the calculation of those additional own funds for VaR and sVaR models is referred to as the 'RNIV framework'.
- 2.2 Firms are responsible for identifying these additional risks, and this should be seen as an opportunity for risk managers and management to better understand the shortcomings of the firm's models. Following this initial assessment, the PRA will engage with the firm to provide challenge and so ensure an appropriate outcome.

### Scope of the Risks not in VaR (RNIV) framework

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<sup>1</sup> [www.bankofengland.co.uk/pras/supervision/approach/default.aspx](http://www.bankofengland.co.uk/pras/supervision/approach/default.aspx).

- 2.3 The RNIV framework is intended to ensure that own funds are held to meet all risks which are not captured, or not captured adequately, by the firm's VaR and sVaR models. These include, but are not limited to missing and/or illiquid risk factors such as cross-risks, basis risks, higher-order risks, and calibration parameters. The RNIV framework is also intended to cover event risks that could adversely affect the relevant business.

### Identification and measurement framework

- 2.4 The PRA expects firms to systematically identify and measure all non-captured or poorly captured risks. This analysis should be updated at least quarterly, or more frequently at the request of the PRA. The measurement of these risks should capture the losses that could arise due to the risk factor(s) of all products that are within the scope of the relevant internal model permission, but are not adequately captured by the relevant internal models.

### Identification of risk factors

- 2.5 The PRA expects firms to, on a quarterly basis, identify and assess individual risk factors covered by the RNIV framework. The PRA will review the results of this exercise and may require that firms identify additional risk factors as being eligible for measurement.

### Measurement of risk factors

- 2.6 Where sufficient data is available, and where it is appropriate to do so, the PRA expects firms to calculate a VaR and sVaR metric for each risk factor within scope of the framework. The stressed period for the RNIV sVaR should be consistent with that used for sVaR. No offsetting or diversification may be recognised across risk factors included in the RNIV framework. The multipliers used for VaR and sVaR should be applied to generate an own funds requirement.
- 2.7 If it is not appropriate to calculate a VaR and sVaR metric for a risk factor, a firm should instead measure the size of the risk based on a stress test. The confidence level and capital horizon of the stress test should be commensurate with the liquidity of the risk, and should be at least as conservative as comparable risk factors under the internal model approach. The capital charge should be at least equal to the losses arising from the stress test.

### Reporting of RNIV

2.8 Firms that are required to compute RNIV should complete FSA005 for the relevant rows.

When submitting FSA005, firms are advised to complete the fields as follows:

- populate the table under element 63, filling in both fields in each row;
- element 64 should be the total of all values entered in 63 column B.
- in order for the form to validate, the value entered in 64 should also be entered in 61 and 62.

[The remainder of SS13/13 is unchanged]

...