Prudential Regulation Authority

Appendix 17: Draft amendments to SS12/13 – Counterparty credit risk

Consultation Paper | CP16/22

November 2022
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In this appendix, new text is underlined and deleted text is struck through.

1 Introduction

1.1 This supervisory statement is addressed to firms that are subject to the provisions of the Capital Requirements Regulation (CRR). This statement:

- clarifies the Prudential Regulation Authority’s (PRA’s) expectations as to the inclusion of securities financing transactions (SFTs) in the calculation of the credit valuation adjustment capital charge;
- clarifies the identification of qualifying central counterparties;
- sets out the factors which the PRA expects such firms to take into account when applying for certain permissions related to the counterparty credit risk regulatory framework; and
- sets out the PRA’s approach to post approval model changes for Internal Model Method (IMM) models and Value-at-Risk models used for SFTs (‘SFT VaR Method’ models), to counterparty credit risk advanced model approaches.

1.2 This statement should be considered in addition to the requirements in CRR Articles 162 of the Credit Risk: Internal Ratings Based Approach (CRR) Part of the PRA Rulebook and 382; the Credit Valuation Adjustment Risk, Counterparty Credit Risk (CCR) and Credit Risk Mitigation (CRR) Parts of the PRA Rulebook; and the high-level expectations outlined in ‘The PRA’s approach to banking supervision’. 2

2 Factors which the PRA expects firms to take into account when applying for certain permissions related to the counterparty credit risk regulatory framework

Use of ‘Internal CVA model’ for the calculation of the maturity factor ‘M’

2.1 This section sets out the PRA’s expectations for granting a firm permission to use its own one-sided credit valuation adjustment internal models (an ‘Internal CVA model’) for the purpose of estimating the Maturity factor ‘M’, as proposed under CRR Article 162(2), paragraph (h) of the Credit Risk: Internal Ratings Based Approach (CRR) Part.

2.3 Subject to permission being granted by the PRA, as the relevant competent authority, firms may replace the formula for the Maturity factor ‘M’, as set out in CRR Article 162(2), paragraph (g) of the Credit Risk: Internal Ratings Based Approach (CRR) Part, with the ‘effective credit duration’ derived from the firm’s Internal CVA model.

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1 The onshored and amended UK version of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, referred to as the ‘CRR’ in this SS.

2 Available at: https://www.bankofengland.co.uk/prudential-regulation/publication/pras-approach-to-supervision-of-the-banking-and-insurance-sectors.
2.5 A firm that wishes to make an application under CRR Article 162(2), paragraph (h) of the Credit Risk: Internal Ratings Based Approach (CRR) Part should provide a satisfaction justification for the use of an internal CVA model for estimating the maturity factor ‘M’. The PRA does not consider the reduction of the own funds requirements for counterparty credit risk to be a reasonable justification. The PRA will also require highly conservative modelling assumptions within a firm’s Internal CVA model for the purpose of CRR Article 162(2), paragraph (h) of the Credit Risk: Internal Ratings Based Approach (CRR) Part.

2.6 To apply for the permission set out in CRR Article 162(2), paragraph (h) of the Credit Risk: Internal Ratings Based Approach (CRR) Part permission, firms should contact the PRA.

Permission to set the maturity factor ‘M’ to 1 for the Counterparty Credit Risk default charge

[This sub-section has been deleted.]

2.7 [Deleted] This section sets out the PRA’s expectations for granting a permission to firms that use the Internal Model Method (IMM) and/or that use an internal Value-at-Risk (VaR) model for specific risk associated with traded debt instruments to set to 1 the Maturity factor ‘M’ defined in CRR Article 162.

2.8 [Deleted] CRR Article 162(2), paragraph (i) allows a firm using the IMM to set the Maturity factor ‘M’ to 1 provided the firm’s internal VaR model for specific risk associated with traded debt instruments reflects the effect of rating migration. This is subject to the PRA’s permission.

2.9 [Deleted] Internal VaR models for specific risk associated with traded debt instruments are not designed to capture the effects of rating migrations. The risk captured by these models is based on a ten-day time horizon which does not appropriately reflect the dynamics of rating migrations, which occur on an irregular and infrequent basis. This deficiency was one of the main reasons for the introduction of a separate risk measure for the capture of both default and migration risk, based on a one-year time horizon (the ‘IRC’ model, CRR Article 372). Since the challenges of appropriately capturing credit rating migrations in an internal VaR model are significant, the PRA expects firms to demonstrate a strong case for the granting of the permission set out in CRR Article 162(2), paragraph (i).

2.10 [Deleted] A firm that wishes to make an application under CRR Article 162(2), paragraph (i) should provide a satisfaction justification for the use of its internal VaR to capture the risks associated with rating migration. The reduction of the own funds requirements for counterparty credit risk is not considered by the PRA to be a reasonable justification. The PRA expects highly conservative modelling assumptions for the capture of rating migrations within a firm’s internal VaR model for the purpose of satisfying the requirements of CRR Article 162(2), paragraph (i).

2.11 [Deleted] To apply for the permission proposed under CRR 162(2), paragraph (i), firms should contact the PRA.

3 Inclusion of securities financing transactions in the scope of the CVA capital charge own funds requirement

3.1 This section sets out the PRA’s determination of when risk exposures arising from securities financing transactions (SFTs) should be deemed material and should be deemed covered transactions for the purpose of being included in the scope of the own funds requirements for credit valuation adjustment (CVA) risk in accordance with CRR Article 382(2) the Credit Valuation Adjustment Risk Part of the PRA Rulebook.

...
3.4 Where these conditions are met, firms must include SFTs as covered transactions in the scope for the purpose of own funds requirements for CVA risk. The PRA may review firms’ methodology for determining the inclusion of these SFT transactions in the scope of own funds requirements for CVA risks.

5 Annual SIF-SMF attestation for Internal Model Method counterparty credit risk internal models

5.1 The PRA expects an appropriate individual in a Significant Influence Function (SIF) Senior Management Function (SMF) role to provide to the PRA on an annual basis written attestation that:

- the firm’s internal approaches IMM models for which it has received a permission comply with the requirements in Part 3Three Title II of the CRR, and any appropriate PRA counterparty credit risk supervisory statements; and

- where a model has been found not to be compliant, a credible plan for a return to compliance is in place and being completed.

5.2 Firms should agree the appropriate SIF-SMF for providing compliance attestations with the PRA, noting that the PRA would not expect to agree more than two SIF-SMFs to cover all the firm’s counterparty credit risk internal IMM models as described in Part Three Title II of the CRR.

5A Annual SMF attestation for standardised approach to CVA risk

[All text in this chapter is new and has not been underlined.]

5A.1 For firms with permission to use the standardised approach to CVA risk (SA-CVA), the PRA expects an appropriate individual in an SMF role to provide to the PRA on an annual basis written attestation that:

- the firm’s internal approaches for which it has received a permission comply with the requirements in the Credit Valuation Adjustment Risk Part, and any appropriate PRA counterparty credit risk supervisory statements; and

- where internal approaches have been found not to be compliant, a credible plan for a return to compliance is in place and being completed.

5A.2 Firms should agree the appropriate SMF for providing compliance attestations with the PRA, noting that the PRA would not expect to agree more than two SMFs to cover all the firm’s SA-CVA approaches, as described in the Credit Valuation Adjustment Risk Part.

5B Annual SMF attestation for SFT VaR Method models

[All text in this chapter is new and has not been underlined.]

5B.1 For firms using the SFT VaR Method in accordance with Articles 221(1) or 221(3) of the Credit Risk Mitigation (CRR) Part, the PRA expects an appropriate individual in an SMF role to provide the following written attestations to the PRA:

- an annual attestation that the firm is either (a) fully compliant, (b) materially compliant, or (c) materially non-compliant with the relevant CRR requirements, PRA rules and SSs; and
where the individual in the SMF role attests that the firm is materially non-compliant under the prior bullet, the attestation should include confirmation that a credible plan for a return to compliance in a timely manner is in place and is being implemented.

5B.2 Firms should agree the appropriate SMF for providing compliance attestations with the PRA. The PRA does not expect to agree to more than two SMFs covering all of the firm’s SFT VaR Method models.

6 Counterparty credit risk advanced model approaches Internal Model Method: process for model post-approval changes

6.1 This section describes the PRA’s approach for post-approval changes to Counterparty Credit Risk Internal Model Method (IMM) models as defined in Section 6 of Title II, Chapter 6 of the CRR and Internal Models approach for Master netting agreements (‘Repo VaR’) as defined in Article 221 of the CRR, including extensions of the scope of approval, and roll out of portfolios according to the roll-out plan; it suggests the documentation the PRA would seek to support the proposed change and provides an overview of the PRA’s response to these advised changes.

6.4 The PRA will ask for prior information only for the most material changes (defined in paragraph 6.10) to their IMM or Repo VaR model, as described in paragraph 6.13. The PRA envisages that this will typically result in only a few pre-notifications on average per year per firm, even from the largest firms. For details about the changes, the PRA will rely to the extent it can on information generated internally by the firms. This should foster a pragmatic, ‘no surprises’, and proportionate regime.

6.7 Firms should notify the PRA of significant changes to IMM or Repo VaR models prior to these changes being implemented for capital purposes. The permission will offer some broad guidelines around factors which constitute significant change. The starting point is the assumption that firms will proactively advise supervisors of significant events or issues affecting the operation of the advanced model with the onus on the firm to judge what is significant.

6.13 Depending on the materiality of changes, the requirements with regards to parallel running as defined under Article 289(2) of the CRR may change. The PRA does not intend to apply any formal requirement for parallel running to changes of IMM and Repo VaR systems. The PRA would, however, expect firms themselves to include parallel running to the extent they deem necessary as part of their normal general project management disciplines when introducing new or enhanced risk management tools.

6.19 There will be some circumstances where a fee will be applied — for example, when a firm is extensively changing the scope of its model approval or following a merger or acquisition that impacts the materiality of business in scope of an advanced approach IMM permission.

7 SFT VaR Method: process for model changes

[All text in this chapter is new and has not been underlined.]
Submission of changes to SFT VaR Method models

7.1 In accordance with Articles 221(10) and 221(11) of the Credit Risk Mitigation (CRR) Part, a firm must:

(a) obtain prior approval for material changes to SFT VaR Method models if it has a permission under Article 221(1) of the Credit Risk Mitigation (CRR) Part;

(b) pre-notify material changes to SFT VaR Method models if it uses the SFT VaR Method in accordance with Article 221(3) (but does not have a permission under Article 221(1) of the Credit Risk Mitigation (CRR) Part); and

(c) post-notify all other changes to SFT VaR Method models on at least a quarterly basis.

7.2 The PRA considers that an extension to the scope of an SFT VaR Method model, or the transfer of additional portfolios to the SFT VaR Method, would fall within the scope of changes referred to in Articles 221(10) and 221(11).

7.3 The PRA considers that the notification of changes referred to in Article 221(11) of the Credit Risk Mitigation (CRR) Part may be made in summary form.

7.4 The PRA expects that a firm wishing to make a change to its SFT VaR Method models should self-assess the proposed change against all relevant PRA rules and SS expectations. The PRA considers that this self-assessment should be sufficiently rigorous to identify areas of non-compliance and that a high-level gap analysis or assessment that places reliance on the firm’s governance process for model development is unlikely to form an adequate self-assessment.

7.5 Firms are responsible for ensuring that SFT VaR Method models and any changes to SFT VaR Method models are materially compliant with the relevant requirements. Firms should not assume that the lack of a response from the PRA to a submission indicates that the change is compliant or materially compliant.

7.6 There will be some circumstances where a fee will be applied, for example, when a firm is extensively changing the scope of its model approval or following a merger or acquisition that impacts the materiality of business in scope of an SFT VaR Method permission.

Examples of material and immaterial changes

7.7 The PRA considers that SFT VaR model changes should be considered to be material if they meet any of the following criteria:

(a) development of new models to cover products currently not in scope of existing models;

(b) a model change resulting in a change in CCR capital requirements for the UK consolidation group greater than 5% in either direction (that is, either an increase or decrease of capital requirements) or a change in gross EAD (calculated gross of netting, margin, and collateral) greater than 5% in either direction;

(c) changes to the calculation system. These could include:

   (i) structural changes to the system used to generate exposure profiles; and

   (ii) re-development or optimisation of existing routines which could lead to significant changes in the output of the model;

(d) any other change that significantly impacts the operation of the model.
7.8 The PRA considers that the following types of changes are not likely to be material unless one of the criteria in paragraph 7.7 is also met:

(a) other changes to currently approved models. These could include:

(i) introduction of new risk factors;

(ii) changes to the evolution process of existing risk factors;

(iii) calibration methodology; and

(iv) changes to the pricing functions used;

(b) changes to the models due to changes in the composition of the portfolios and products traded (e.g., changes due to merger and/or acquisitions).

**Back-testing**

7.9 The PRA expects firms to demonstrate that model changes are appropriate through back-testing. Firms are expected to back-test SFT VaR Method models and the relevant components that input into the calculation of EAD using historical data movements in market risk factors considering a number of distinct time horizons out to at least one year. The back-testing should cover a range of observation periods representing a wide range of market conditions.

**Documentation**

7.10 The PRA expects firms applying for permission to make a material change to an SFT VaR Method model, or pre-notifying a material change to an SFT VaR Method model, to submit the information set out in Appendix B.

7.11 The PRA expects firms to submit the following information when post-notifying the PRA of a non-material SFT VaR model change:

(a) a short description of the change, including the date on which the change was implemented;

(b) confirmation that the change has been reviewed through the firm’s internal governance processes; and

(c) confirmation that a self-assessment of the change against relevant CRR requirements, PRA rules and SSPE expectations has been completed and that no areas of material non-compliance have been identified.

7.12 Following post-notification of a change the PRA may request additional information, including internal documentation consistent with the relevant parts of Appendix B.

**Pillar 2**

7.13 A change to an SFT VaR Method model may trigger a review of the firm’s capital position under Pillar 2, depending on the magnitude of the effect on the firm’s capital position. The PRA may request submission of revised Internal Capital Adequacy Assessment Process (ICAAP) documentation.

...
A  IMM and Repo-VaR post-approval model changes process

B  Documentation required for material changes
Appendix A: IMM and Repo Var Post-Approval Model Changes Process

For all model changes, firms are expected to complete the pro-forma, which can be found on the Bank of England’s website at www.bankofengland.co.uk/pra/Pages/authorisations/crr/applying.aspx.

Appendix B: Documentation required for material changes

This appendix sets out the documentation that the PRA expects firms to submit for material changes to IMM models (in accordance with As detailed under paragraph 6.15 (step 4)) and material changes to SFT VaR.
Method models (in accordance with paragraphs 7.7 and 7.10) if the changes to the IMM or Repo VaR model are recognized to be material, further documentation will be necessary for review from the PRA. The following list represents minimum expectations which should be met when applying for material changes. The PRA may ask for further information and/or documentation on a case by case basis. This section is divided in two main categories:

- Changes to models
- Changes to the counterparty risk system

### Changes to models (new model being introduced or changes to existing models)

The following is the minimum information that should be provided for changes to models.

- **CRR self-assessment**
  
  Self-assessment against relevant CRR requirements, PRA rules and SS expectations. This should include an assessment against any requirement relevant to the changes made and sign-off from an appropriate individual in an SMF role Significant Influence Function attesting that the model is fit for purpose and meets regulatory requirements.

- **Distribution of risk** for an appropriate parallel run period for the transactions covered by the model changes according to the following categories (each table should include number of trades, Positive MtM, EAD, PFE, regulatory capital requirements using the old model, regulatory capital requirements using the new model):
  
  1. **Product** (if more than one) for number of trades; positive MtM; and exposure and capital measures calculated gross of netting;
  2. **Counterparty Credit Rating** (ie Probability of Default rating);
  3. **Industry**;
  4. **Country/Geographic region**.

- **Independent validation report** relevant to the changes to models.

- **Back-testing results** for an appropriate parallel run period.

- **Sign off minutes** for model approval from the relevant committees.

The following information should be provided if documentation previously submitted has changed as a result of the changes to models.

- **Technical documentation** outlining the methodology used to model and calibrate risk factors. This documentation should also include the methodology used to estimate the relationship between risk factors, eg correlation.

- **Technical documentation** for the methodology used to price the product(s) modelled.

- **Technical documentation** for the modelling of collateral if modelled jointly with exposures.

- **Technical documentation** outlining the implementation of netting/margining rules for the new model.

- **Updated policy** for:
  
  1. Back-testing
Changes to the counterparty risk system

If changes to the system occur in conjunction with material changes to models the latter would result in a separate submission of documents as outlined in the section ‘Changes to models (new model being introduced or changes to existing models)’. The following is the minimum information that should be provided for changes to the counterparty risk system.

- **CRR self-assessment**: Self-assessment against relevant CRR requirements, PRA rules and SS expectations. This should include an assessment against any requirement relevant to the changes made and sign-off from an appropriate individual in an Significant Influence Function (SMF) role attesting that the model is fit for purpose and meets regulatory requirements.

- Distribution of risk: distribution of risk, over an appropriate parallel run period, for the transactions covered by changes according to the following categories (each table should include number of trades, positive MtM, EAD, PFE, regulatory capital requirements prior to and after changes being applied):
  1. Product (if more than one) for number of trades; positive MtM; and exposure and capital measures calculated gross of netting;
  2. Counterparty Credit Rating (ie Probability of Default rating);
  3. Industry;
  4. Country/Geographic Region.

- Operational arrangements (in the form of internal documentation or policies as relevant):
  1. Description of the Control Unit in charge of design of model (including organizational chart);
  2. Description of the Control Unit in charge of implementation into production system (including organizational chart);
  3. Description of the Control Unit in charge of initial and ongoing validation of Counterparty Risk Exposure Model (including organizational chart);
  4. Data integrity assessment and policy around data quality;
  5. Sample reports of the output of the model (as used and seen by model users);
  6. Impact on trading limits (ie change in credit policy with regards to allocation/management of credit limits).

- Back-testing analysis and results for an appropriate parallel running period.

The following information should be provided if documentation previously submitted has changed as a result of the changes to the counterparty risk system.
Updated policy for:

(i) Stress Testing

(ii) Wrong Way Risk

(iii) Back-testing

(iv) Collateral

(v) Validation (covering both initial and ongoing validation)