BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

Consultation Paper | CP15/20

Market risk: Calculation of risks not in value at risk, and stressed value at risk

October 2020

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Responses are requested by Friday 6 November 2020.

In light of current measures to help prevent the spread of COVID-19, please address any comments or enquiries by email to: CP15_20@bankofengland.co.uk.

Alternatively, please address any comments or enquiries to:
Market and Counterparty Credit Risk Policy, TS-03(C-D)
Bank of England
Threadneedle Street
London
EC2R 8AH

Prudential Regulation Authority | 20 Moorgate | London EC2R 6DA

Contents

1 Overview

1.1 This Consultation Paper (CP) sets out the Prudential Regulation Authority's (PRA) proposals to update its expectations regarding (i) the measurement of risks not in value at risk (RNIV); and (ii) the meaning of 'period of significant financial stress relevant to the institution's portfolio' for stressed value at risk (sVaR) calculation. The proposals would make amendments to Supervisory Statement (SS) 13/13 'Market risk' (Appendix).

1.2 The CP is relevant to all firms to which Capital Requirements Directive IV[1] applies.

Background

1.3 Market volatility related to the Covid-19 outbreak has highlighted elements of the market risk framework that may lead to an excessively pro-cyclical increase in own funds requirements during periods of stress. For two of those elements (frequency of calculation for the RNIV measure, and identification of 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation), the PRA proposes to set expectations that are intended to attenuate the pro-cyclicality in own funds requirements for market risk.

Implementation

1.4 The PRA proposes that the draft changes to SS13/13 would take effect from the publication of the final policy.

Responses and next steps

1.5 This consultation closes on Friday 6 November 2020. The PRA invites feedback on the proposals set out in this consultation. Please address any comments or enquiries to CP15_20@bankofengland.co.uk.

1.6 The proposals set out in this CP have been designed in the context of the UK's withdrawal from the European Union (EU) and entry into the transition period, during which time the UK remains subject to European law. The PRA will keep the policy under review to assess whether any changes would be required due to changes in the UK regulatory framework at the end of the transition period, including those arising once any new arrangements with the EU take effect.

1.7 The PRA has assessed that the proposals would not need to be amended under the EU (Withdrawal) Act 2018 (EUWA). Please see PS5/19 'The Bank of England's amendments to financial services legislation under the European Union (Withdrawal) Act 2018' for further details.[2]

1.8 The draft SS attached to this CP should be read in conjunction with SS1/19 'Non-binding PRA materials: The PRA's approach after the UK's withdrawal from the EU'.[3]

1 Capital Requirements Directive (2013/36/EU) (CRD) and Capital Requirements Regulation (575/2013) (CRR) – jointly 'CRD IV'
2 April 2019: https://www.bankofengland.co.uk/paper/2019/the-boes-amendments-to-financial-services-legislation-under-the-eu-withdrawal-act-2018.
3 April 2019: https://www.bankofengland.co.uk/prudential-regulation/publication/2019/non-binding-pra-materials-the-pras-approach-after-the-uks-withdrawal-from-the-eu-ss.

2 Proposals

2.1 This chapter sets out the PRA's proposed expectations relating to:

- measurement of RNIV; and
- meaning of 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation.

Measurement of RNIV

2.2 The PRA sets out in the SS the expectation that firms identify any risks which are not adequately captured by market risk models, and to hold additional own funds against those risks, using a methodology that is referred to as the 'RNIV framework'. This expectation is silent on whether RNIV own funds requirements should reflect the firm's portfolio across the preceding quarter or only at a single point in time. The PRA has identified, due to significant market volatility related to the Covid-19 outbreak, that RNIV own funds requirements calculated at a single point in time (for example, at quarter-end) can suddenly and unexpectedly increase, where a sudden increase in market volatility occurs close to quarter-end.

2.3 The PRA therefore proposes that:

- RNIV own funds requirements should be calculated at quarter-end as the average across the preceding twelve week period of an RNIV measure calculated at least weekly; and
- for those risk factors where a firm calculates an RNIV measure less frequently than weekly, the firm should notify the PRA and be able to justify on an ongoing basis their reasons for not performing that calculation at least weekly.

2.4 The PRA considers that this proposal would improve consistency in the calculation of RNIV own funds requirements across firms, and where averaging of the RNIV measure is applied, reduce the potential for significant market volatility near quarter-ends to drive sudden spikes in own funds requirements. RNIV averaging would also mitigate the theoretical concern that firms may optimise their trading portfolios at quarter-ends to reduce own funds requirements.

Meaning of 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation

2.5 CRR Article 365(2) requires a firm using market risk internal models to calculate a sVaR that is calibrated to a 'period of significant financial stress relevant to the institution's portfolio'. Paragraph 10.3 in the SS currently sets an expectation that firms ensure that the sVaR period chosen is equivalent to the period that would maximise value at risk (VaR) given the firm's portfolio, but is otherwise silent on the observation period that firms should consider for identifying the period of significant financial stress. Market volatility related to the Covid-19 outbreak has additionally posed a question about the potential overlap between VaR and sVaR measures.

2.6 The PRA therefore proposes that:

- for the purposes of identifying a 'period of significant financial stress relevant to the institution's portfolio' for sVaR, firms should consider an observation period that starts at least from Monday 1 January 2007. The observation period generally does not need to include the most recent 12 months of historical data immediately preceding the point of calculation;

- firms may include the most recent 12 months in their observation period, where it leads to a more appropriately prudent outcome; and
- where a firm believes that the observation period for determining the sVaR stress period should exclude more than the most recent 12 months, the firm should contact the PRA setting out, and providing justification for, its rationale.

2.7 This proposal is expected to improve consistency in the identification of the 'period of significant financial stress relevant to the institution's portfolio' across firms, ensure that firms consider a sufficiently broad observation period, and minimise overlaps between the VaR and sVaR measures.

3 The PRA's duty to consult

3.1 The PRA has a statutory duty to consult when introducing new rules, and when not making rules, has a public law duty to consult widely where it would be fair to do so. When doing so, the PRA provides the following in relation to the proposed policy:

- a cost benefit analysis;
- an explanation of the PRA's reasons for believing that making the proposed policy is compatible with the PRA's duty to act in a way that advances its general objective, insurance objective (if applicable), and secondary competition objective;
- an explanation of the PRA's reasons for believing that making the proposed policy is compatible with its duty to have regard to the regulatory principles; and
- a statement as to whether the impact of the proposed policy will be significantly different to mutuals than to other persons.

3.2 The Prudential Regulation Committee (PRC) should have regard to aspects of the Government's economic policy as recommended by HM Treasury.[4]

3.3 The PRA is also required by the Equality Act 2010 to have due regard to the need to eliminate discrimination and to promote equality of opportunity in carrying out its policies, services and functions.[5]

Cost benefit analysis

Measurement of RNIV

3.4 This proposal provides clarity to ensure that firms have in place consistent practices for the calculation frequency of the RNIV measure used to determine RNIV own funds requirements.

3.5 The PRA considers that the benefits of the proposal include:

- enhanced safety and soundness for any affected firms, as RNIV capital requirements will be based on the composition of their portfolio throughout the most recent quarter rather than at a single point in time and will therefore better reflect the range of possible risks that a firm is

4 Section 30B of the Bank of England Act 1998.
5 Section 149.

exposed to over a period of time; RNIV own funds requirements should also become less susceptible to sudden increases in market volatility at quarter-end, providing firms greater certainty about those RNIV own funds requirements; and

- increased consistency and transparency with the PRA's supervisory approach, as updating expectations on calculation frequency of the RNIV measure will improve transparency of the RNIV framework and improve consistency across firms in how they calculate RNIV own funds requirements.

3.6 The PRA recognises that expecting weekly calculation of the RNIV measure may impose additional costs to firms, and therefore proposes that the RNIV measure may be calculated less frequently than weekly for certain risks where a firm notifies the PRA and is able to justify why a weekly calculation is not appropriate for those risks. Therefore, the PRA considers that the overall cost of weekly calculation of the RNIV measure is of limited significance relative to the benefits outlined above.

Meaning of 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation

3.7 This proposal ensures that firms consider consistent observation periods for the purposes of determining the 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation.

3.8 The PRA considers that the benefits of the proposal include:

- enhanced safety and soundness for any affected firms, through setting expectations that the observation period used for determining the sVaR stress period should go back to Monday 1 January 2007 and therefore should at least cover the 2007/2008 market stresses; and

- increased consistency and transparency with the PRA's supervisory approach, as setting the proposed expectations on the observation period used for determining the sVaR stress period will improve transparency and improve consistency across firms in how they determine that period of significant financial stress.

3.9 In light of the PRA's existing expectations on the meaning of 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation, the PRA considers that no significant additional costs will be incurred by firms as a result of the proposal.

Compatibility with the PRA's objectives

3.10 The PRA considers that the proposals in this CP advance its general objective to promote the safety and soundness of the firms it regulates by updating the PRA's expectations on the calculation of the RNIV measure, and the determination of the 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation. The proposals aim to ensure that the level of own funds that firms are expected to maintain is adequate and not unduly excessive in relation to the risks to which they are, or may be, exposed.

3.11 When discharging its general functions in a way that advances its objectives, the PRA has, as a secondary objective, a duty, as far as reasonably possible, to act in a way that facilitates effective competition in markets for services provided by PRA-regulated firms carrying on regulated activities. The PRA's proposals would facilitate a more consistent interpretation of the calculation of the RNIV measure and the determination of the 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation. The PRA considers a more consistent interpretation of those elements would help to ensure that firms take a more unified approach in determining own funds requirements for sVaR and RNIV.

Regulatory principles

3.12 In developing the proposals in this CP, the PRA has had regard to the regulatory principles. Three of the principles are of particular relevance:

- The principle that a burden or restriction which is imposed on a person should be proportionate to the benefits which are expected to result from the imposition of that burden. The PRA considers the increased costs to firms that would result from the proposals in this paper are small but necessary to achieve the regulatory outcome of promoting the safety and soundness of PRA regulated firms, by limiting excessive pro-cyclical increases in own funds requirements for market risk.

- The principle that the PRA should use its resources in the most efficient and economical way. Updating the PRA's supervisory expectations with respect to the two proposals in this CP would result in better and more efficient engagement between the PRA and users of market risk internal models.

- The principle that the PRA should exercise its functions as transparently as possible. The PRA is aware of inconsistent interpretation on the frequency of calculating the RNIV measure, and the potential for inconsistent interpretation on the determination of the 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation. The PRA considers that setting out expectations in an SS is the most suitable way to provide greater clarity.

Impact on mutuals

3.13 The PRA considers that the impact of the proposed changes will not affect mutuals, as the proposed changes relate to the market risk internal model approach (IMA) and no mutuals currently use or are expected to use the IMA.

HM Treasury recommendation letter

3.14 HM Treasury has made recommendations to the Prudential Regulation Committee (PRC) about aspects of the Government's economic policy to which the PRC should have regard when considering how to advance the PRA's objectives and apply the regulatory principles.[6] The PRA has considered these in relation to the proposals.

3.15 The aspects of the Government's economic policy most relevant to the proposals in this CP are:

- competition, by ensuring a level playing field between firms (considered in paragraph 3.11); and

- competitiveness.

3.16 On the aspect of competitiveness, making the UK and London an attractive domicile for internationally active financial institutions through the promotion of robust institutions, the PRA considers that it does so by promoting the safety and soundness of the firms it regulates, and by aiming to ensure that the level of own funds that firms are expected to maintain is adequate and particularly is not unduly excessive in relation to the risks to which firms are, or may be, exposed.

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6 Information about the PRC and the recommendations from HM Treasury are available on the Bank's website at https://www.bankofengland.co.uk/about/people/prudential-regulation-committee

Equality and diversity

3.17 The PRA considers that the proposals do not give rise to equality and diversity implications.

Appendix: Draft amendments to Supervisory Statement 13/13 'Market risk'

This appendix sets out the proposed changes to SS13/13 'Market risk'. Underlining indicates new text and striking through indicates deleted text.

…

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

…

Measurement of risk factors

2.6 Where sufficient data are available, and where it is appropriate to do so, the PRA expects firms to calculate a VaR and sVaR metric as the RNIV measure 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~~.

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 factor, and should be at least as conservative as comparable risk factors under the internal model approach. The RNIV measure ~~capital charge~~ should be at least equal to the losses arising from the stress test.

2.7A The PRA expects that RNIV own funds requirements should be calculated at quarter-end as the average across the preceding twelve week period of an RNIV measure calculated at least weekly. For each RNIV measure calculated from VaR and sVaR metrics, the multipliers used for VaR and sVaR should be applied to the aforementioned average to determine the RNIV own funds requirement. For those risk factors where a firm calculates an RNIV measure less frequently than weekly, the PRA expects that the firm should notify the PRA, and be able to justify on an ongoing basis, their reasons for not performing that calculation at least weekly.

…

10 Stressed VaR calculation

…

Meaning of 'period of significant financial stress relevant to the institution's portfolio'

10.3 Subject to paragraph 10.3A, the ~~The~~ firm should ensure that the sVaR period chosen is equivalent to the period that would maximise VaR given the firm's portfolio. There is an expectation that a stressed period should be identified at each legal entity level at which capital is reported. Therefore, group-level sVaR measures should be based on a period that maximises the group-level VaR, whereas entity-level sVaR should be based on a period that maximises VaR for that entity.

10.3A The PRA expects that, to identify their sVaR period, firms should consider an observation period that starts at least from Monday 1 January 2007. The PRA expects that the observation period generally does not need to include the most recent 12 months of historical data immediately preceding the point of calculation, in order to minimise overlaps with VaR. However, firms may include the most recent 12 months in their observation period, where it leads to a more appropriately prudent outcome. Where a firm believes that the observation period for determining the sVaR stress period should exclude more than the most recent 12 months (for example, where the firm uses more than the most recent 12 months to calculate VaR), the firm should contact the PRA setting out, and providing justification for, its rationale.