BANK OF ENGLAND
PRUDENTIAL REGULATION
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Publication

Policy Statement | PS23/20

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

November 2020

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Prudential Regulation Authority | 20 Moorgate | London EC2R 6DA

Contents

1 Overview

1.1 This Prudential Regulation Authority (PRA) Policy Statement (PS) provides feedback to responses to Consultation Paper (CP) 15/20 'Market risk: Calculation of risks not in value at risk, and stressed value at risk'.[1] It also contains the PRA's final policy, in the form of the updated Supervisory Statement (SS) 13/13 'Market Risk' (Appendix).

1.2 This PS is relevant to all firms to which Capital Requirements Directive IV (CRD IV)[2] applies.

Background

1.3 In CP15/20, the PRA consulted on updating SS13/13 with expectations relating to measurement of risks not in value at risk (RNIV), and to the meaning of 'period of significant financial stress relevant to the institution's portfolio' for stressed value at risk (sVaR) calculation.

Measurement of RNIV

1.4 The PRA proposed 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.

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

1.5 The PRA proposed 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 twelve months of historical data immediately preceding the point of calculation;
- firms may include the most recent twelve 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 twelve months, the firm should contact the PRA setting out, and providing justification for its rationale.

Summary of responses

1.6 The PRA received six responses to CP15/20. On measurement of RNIV, respondents generally agreed with the benefits of expecting RNIV own funds to be calculated as an average RNIV measure across the preceding twelve week period; however all respondents argued for a less frequently than weekly calculation of the RNIV measure, at least for certain RNIVs. On the meaning of 'period of significant financial stress relevant to the institution's portfolio' for sVaR calculation, the majority of

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1 October 2020: https://www.bankofengland.co.uk/prudential-regulation/publication/2020/market-risk-rniv-svar.
2 Capital Requirements Directive (2013/36/EU) (CRD) and Capital Requirements Regulation (575/2013) (CRR) – jointly 'CRD IV'.

respondents that expressed a view agreed with the PRA's proposed expectations. The PRA's feedback to these responses, and its final policy decisions, are set out in Chapter 2.

Changes to draft policy

1.7 Following consideration of the responses, the PRA has changed the draft policy to expect that RNIV own funds requirements should be calculated as the average across the preceding three month period, of an RNIV measure calculated at least monthly (rather than weekly, as proposed in CP15/20). The PRA has set an additional expectation that firms should still consider whether more frequent calculation than monthly may be appropriate for more material, or more variable, RNIV positions. The PRA has also set an expectation that the relevant RNIV measure for at least 90% of RNIV own funds requirements should be calculated at least monthly. This means that the RNIV measure for up to 10% of RNIV own funds requirements may be calculated less frequently than monthly. Further details on these changes are set out in Chapter 2.

1.8 The PRA considers that these changes will lead to a reduction in the costs incurred by firms that calculate RNIV own funds requirements and have a limited effect on the expected benefits of this expectation. The PRA considers that these changes to the proposed policy will not have any significantly different impact on mutuals than for other firms. As a result, the cost benefit analysis from CP15/20 has not been updated in respect of these changes.

Implementation

1.9 The changes to SS13/13 will be effective on publication of this PS, on Thursday 26 November 2020. The PRA appreciates that, particularly for the measurement of RNIV, firms may not be in a position to immediately comply with the PRA's new expectations. Firms should contact their supervisor to agree their plans, and a reasonable timeline for complying with these new expectations.

1.10 The policy set out in this PS has 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.

1.11 The PRA has assessed that the policy 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'[3] for further details.

2 Feedback to responses

2.1 The PRA has considered the responses received to the CP. This chapter sets out the PRA's feedback to those responses, and its final decisions.

3 April 2019: https://www.bankofengland.co.uk/paper/2019/the-boes-amendments-to-financial-services-legislation-under-the-eu-withdrawal-act-2018.

2.2 The feedback set out in this chapter has been grouped by topic into three sections:

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

Measurement of RNIV

2.3 The respondents generally agreed with the PRA's proposal, of RNIV own funds being calculated as an average RNIV measure. One respondent suggested that a single quarterly 'point-in-time' calculation remains adequate for risk-capture of all RNIVs.

2.4 Consistent with the majority of respondents, the PRA has decided not to change the expectation that RNIV own funds requirements should be determined as an average of RNIV measures.

Operational burden and frequency of calculation

2.5 All six respondents argued that weekly calculation would significantly increase operational, governance and technological burdens of calculating RNIV own funds requirements. Two respondents suggested that weekly calculation may not be feasible for certain RNIVs, such as model parameters, illiquid RNIVs, and RNIVs that rely on monthly valuation processes.

2.6 All respondents therefore proposed calculation of at least some RNIVs on a less-frequent basis than weekly. Three respondents proposed that only material RNIVs should be calculated weekly, while less material RNIVs could be calculated less frequently than weekly. The remaining three respondents proposed that monthly rather than weekly calculation would generally be sufficient for all RNIVs. One respondent further proposed that for RNIVs calculated weekly, firms might be permitted to update only position and sensitivity inputs weekly, with other inputs potentially updated less frequently.

2.7 The PRA recognises that the additional operational burden of calculating an RNIV measure weekly rather than monthly may not be warranted for less material RNIVs. The PRA has therefore changed the final policy to expect that RNIV own funds requirements should be calculated as the average across the preceding three month period of an RNIV measure calculated at least monthly (rather than weekly).

2.8 The PRA has added an expectation that firms should consider whether the RNIV measure should be calculated more frequently for more material or more volatile RNIV positions. This recognises that monthly calculation may not be sufficient for more volatile RNIV positions, and that an increased operational burden is justified for more material risks. However, noting the concerns about minimising undue operational burden, the PRA agrees that for such RNIVs, only position and sensitivity inputs need to be updated more frequently than monthly.

2.9 One respondent proposed that firms could be permitted to calculate up to 10% of RNIV own funds requirements less frequently than monthly, and that firms could justify calculating an RNIV measure less frequently than monthly based on low materiality or excessive operational cost.

2.10 The PRA agrees that for a relatively immaterial RNIV position, an RNIV measure may not need to be calculated at least monthly and considers that firms should calculate at least 90% of RNIV own funds requirements at least monthly. To monitor the various calculation frequencies that firms might now use for different RNIVs, the PRA also expects firms to document the materiality and calculation frequency of individual RNIVs. However, the PRA disagrees with the notion that increased operational cost is, by itself, a valid reason for less-than-monthly calculation without consideration of the corresponding benefit of more frequent calculation. Indicatively, the PRA will generally expect firms to provide a risk-based justification for why less-than-monthly calculation of an individual RNIV is warranted (for example, that the RNIV position is immaterial or stable over time). As a result the SS has been updated to reflect this.

2.11 Two respondents raised concerns that, for newly-identified RNIVs, firms may not be able to immediately comply with the PRA's expectations, and that a move to more frequent calculation of RNIVs may not be needed for temporary RNIVs and RNIVs where a firm has a well-defined plan to integrate the RNIV into value at risk models.

2.12 Rather than introduce multiple specific carve-outs from monthly calculation (such as for RNIVs being incorporated into value at risk models, or new or temporary RNIVs), the PRA considers that providing for up to 10% of RNIV own funds requirements to be calculated less frequently than monthly will strike an appropriate balance between providing operational flexibility and ensuring that a material proportion of RNIV capital requirements is calculated at least monthly.

Timelines for complying with new expectations

2.13 One respondent expressed concern that firms may need time to comply with the PRA's new expectations on calculating an RNIV measure more regularly than quarterly.

2.14 The PRA is sensitive to the concern that firms may not be in a position to immediately comply with new expectations on the measurement of RNIV. Firms that face such challenges should contact their PRA supervisor to agree their plans and a reasonable timeline for complying with these new expectations.

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

2.15 The majority of respondents that expressed a view agreed with the PRA's proposed expectations on the observation period used for determining the sVaR stress period.

Excluding the most recent twelve months of historical data immediately preceding the point of calculation

2.16 Two respondents noted that, currently, they intend to continue including the most recent twelve months of historical data in the observation period that they use for determining their sVaR stress period.

2.17 One respondent recommended that firms that use a longer VaR window than the most recent twelve months should be allowed to exclude their full VaR window from their sVaR observation period. Due to the variety of methodologies wherein firms may use a VaR window longer than the most recent twelve months (including weighting schemes that give progressively more weight to more recent data), the PRA does not consider there is always a clear justification for excluding a VaR window greater than twelve months from the sVaR observation period. Instead, and as consulted on, the PRA will expect firms to contact the PRA where they propose to exclude more than the most recent twelve months of data.

2.18 One respondent was unclear about the PRA's intention behind its expectation that the observation period used for determining a firm's sVaR stress period generally does not need to include the most recent twelve months of historical data immediately preceding the point of calculation. As suggested in paragraphs 1.3 and 2.7 of CP15/20, the PRA's intention in setting this expectation is to minimise pro-cyclical increases in sVaR where those increases would already be reflected in VaR (which is an inherently pro-cyclical measure of risk).

Start of the observation period

2.19 Two respondents indicated that they already consider an observation period that starts from Monday 1 January 2007. One respondent proposed that the PRA reconsider fixing the start of the observation period at Monday 1 January 2007, arguing that it would lead to increasing operational burden over time (as the observation period gets progressively longer).

2.20 The PRA has decided not to change its expectation that firms should consider an observation period that starts from Monday 1 January 2007, particularly as the market stresses in 2007 and 2008 remain the most relevant period of stress for a number of firms’ portfolios. The PRA notes that its expectation is also consistent with the revised Basel committee on Banking Supervision market risk framework and the Capital Requirement Regulation (CRR) alternative internal model approach for market risk.

Other responses

2.21 One respondent proposed that, in response to excessively pro-cyclical own funds requirements for market risk, the PRA could consider adjusting firms' back-testing multiplier independently for VaR and sVaR.

2.22 The PRA notes that this is not possible, as Article 366(2) of CRR prescribes a regulatory minimum for back-testing multipliers of at least three.

Appendices

1 **SS13/13 'Market risk', available at: www.bankofengland.co.uk/prudential-regulation/publication/2013/market-risk-ss**.