Market and Counterparty Credit Risk Policy, TS-03(C-D)
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Subject: PRA Consultation Paper | CP15/20 - Market risk: Calculation of risks not in value at risk, and stressed value at risk

The International Swaps and Derivatives Association (‘ISDA’) and the Association for Financial Markets in Europe (‘AFME’), the ‘Joint Associations’ and their members (‘the Industry’) welcome the opportunity to comment on the PRA’s Consultative Document on the calculation of risks not in Value at Risk (‘VaR’) and Stressed VaR.

The Industry recognizes and appreciates the PRA’s efforts in setting supervisory standards and expectations on the calculation of risks not in VaR and the calibration of the Stress VaR window to help reduce the procyclicality of Market Risk capital Requirements.

We commend the PRA’s very welcome and timely actions throughout 2020 to provide support and guidance to firms during the period of severe market volatility caused by the Covid-19 outbreak. We particularly welcome the relief provided to address back-testing exceptions through a commensurate reduction in risks-not-in-VaR (RNIV) capital requirements (subsequently updated to reflect the amendments to the capital requirements regulation (CRR) in August) and furthermore welcomed the guidance that firms are not expected to update their 12 month window used to calculate their SVaR during the ‘current period’ of financial market stress.

The Industry understands that market volatility related to the Covid-19 outbreak and the retrospective impact from these capital measures led to an excessively pro-cyclical effect in own funds requirements for Market Risk and we understand the objectives of this consultation is to help mitigate these effects. However, we are concerned that the proposals in this consultation may lead to overly burdensome operational complexities without the desired outcome of reducing the volatility of Market Risk capital requirements during a crisis period.

1 https://www.bankofengland.co.uk/prudential-regulation/publication/2020/market-risk-rniv-svar
2 https://www.bankofengland.co.uk/prudential-regulation/publication/2020/var-back-testing-exceptions-temporary-approach
4 https://www.bankofengland.co.uk/prudential-regulation/publication/2020/pra-statement-on-prioritisation-covid19
We believe that the impact of the SVaR window moving to the current period and thus overlapping with firms VaR window was primarily responsible for a ‘double count’ of RWAs. Hence, we welcome the PRA’s proposal that firms do not need to include the most recent 12 months of historical data from the observation window in SVaR and ask the PRA to extend this proposal and allow firms that use a longer VaR observation window to exclude this window from SVaR. We believe this also contributed to the volatility of (stressed) RNIVs during this period.

With regard to the calculation of RNIVs, we consider that a change from a monthly/quarterly cycle (dependent on firm) into a weekly one would not provide a materially different outcome (particularly for less material RNIV’s) whilst hindering firm’s efforts of investing more into their own IMA capabilities.

We recommend monthly calculations for all but the most material RNIVs, with an average of three months used for quarterly reporting and propose that a quantitative threshold is provided below which less frequent RNIV calculations would be allowed.

Notwithstanding the above, to help allocate resources effectively, banks which can justify a deviation from calculating RNIVs on a more frequent basis should be allowed to do so.

Finally, if the objective is to stabilize the effects of procyclical in Market Risk RWAs during a stress period, then we believe other supervisory tools might be more impactful. An example of this might be to adjust firms respective ‘backtesting multiplier’ independently for VaR and SVaR, as suggested by OSFI in their COVID-19 response\(^5\).

We thank you in advance for your consideration and please do not hesitate to contact the undersigned associations with questions or if you would like to discuss our recommendations further. We remain committed to assisting policymakers in achieving the objectives of this important consultation.

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\(^5\) [https://www.osfi-bsif.gc.ca/Eng/fl-fid/dti-id/Pages/DTIFAQ_Cov.aspx](https://www.osfi-bsif.gc.ca/Eng/fl-fid/dti-id/Pages/DTIFAQ_Cov.aspx)
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.

Response:
We agree with the position set out in the Consultation Paper that there is a benefit in moving from a point-in-time calculation to an average measure over the preceding quarter in order to reduce the likelihood of unexpected increases in RNIVs that result from market volatility close to quarter-end. However, we consider that a weekly calculation frequency is not feasible or superior for many RNIVs and would not bring material incremental benefit compared to a monthly calculation. We consider that a monthly frequency strikes the right balance between mitigating pro-cyclical effects and feasibility.

For numerous RNIVs it would not be possible to calculate RNIV values weekly due to lack of available data for the underlying risk factor. There are two main drivers for this:

• the risk factor itself, or an input to the RNIV calculation, is unobservable and only marked monthly. For example, model parameters or illiquid/non-modellable risk factors such as vol of vol and equity-interest rate correlation.
• there is a dependency on monthly valuation processes such as Totem consensus data obtained via independent price verification (IPV) or reliance on valuation adjustments that are calculated monthly.

In addition, many RNIVs involve complex calculations which are based on significant amounts of data and take more than one week to validate. As a result, a weekly calculation frequency would either not be feasible or would result in a reduction in the accuracy and timeliness of the RNIV measure.

There would also be significant governance implications associated with a weekly RNIV measure, including additional reviews by senior management, which would require operational changes given that the normal financial reporting cycle operated by most firms for internal purposes is monthly. There would also be a need for Finance teams to calculate certain reserves and valuation adjustments weekly.
If the PRA is committed to a baseline of weekly RNIV runs, one way of reducing this operational burden would be to separate the ‘recalibration’ of an RNIV from ‘updating’ the RNIV calculation to reflect any changes in the firm’s positions – in the same way that a historical simulation VaR is calculated daily based on end of day risks but the input time series of historical market moves can be updated less frequently.

Furthermore, apart from the operational considerations discussed above, the most likely reason why a firm might seek permission to calculate some RNIVs less frequently than the new baseline (whether this is weekly or monthly) is low materiality. It would be helpful if the PRA specified a quantitative threshold below which less frequent RNIV calculations are appropriate.

Furthermore, to help allocate resources effectively banks that can justify a deviation from calculating RNIVs on a more frequent basis, they should be allowed to do so. Examples where bilateral engagement would be welcomed between firms and the PRA are where firms have identified RNIVs that have a well-defined plan for introduction into VaR. A further example is for newly identified RNIVs and how these should receive a ‘grace period’ (e.g. 6 months) before the new RNIV is fully compliant with the proposed averaged calculation requirement. This is because RNIVs can be introduced relatively quickly to meet changing market conditions and automation can happen after implementation.

With respect to the cost-benefit analysis, industry considers that this should be revised to take into account the additional operational burden that a weekly RNIV calculation would impose on firms. This includes the fact that the workload would be significantly increased for the SMEs responsible for calculating RNIV measures and the teams responsible for processing RNIV data.

**Recommendations:**

- The PRA should adopt monthly calculations for all but the most material RNIVs with an average of three months used for quarterly reporting.
- Firms should be allowed to update only position/sensitivity inputs, with other inputs only updated as appropriate and potentially less frequently than the calculation of the RNIV.
- The PRA could provide a quantitative threshold below which a less frequent calculation would be allowed, e.g. No more than 10% of total RNIV is calculated less frequently than monthly unless justified by firms.
- Banks have an interest in measuring RNIVs as often as possible and to aspire to have weekly updates (ultimately retiring RNIVs to include them into VaR) but the PRA should still allow Institutions to deviate from such aspiration if necessary justification is provided (low materiality, too much operational overhead).
- We have included draft text for two possible alternative proposals (one with a weekly baseline and one with a monthly baseline) in an appendix.
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.

Response:

We agree with the objective of minimising the overlap between the VaR and SVaR measures and welcome the PRA’s proposal that firms do not need to include the most recent 12 months of historical data from the observation window. We believe such additional clarity better defines the role of SVaR within the market risk capital framework (not a mere overlapping charge but a charge meant to stabilise the capital charge “through-the-cycles) and it is also aligned with the upcoming spirit of FRTB, where the risk of overlap between observation period has been addressed by means of introducing the mechanism of Stressed vs Current Period.

The Industry appreciates the PRA has also taken into account that as of today firms might be using an observation period for VaR longer than 12 months (e.g. 3 years) and that in principle the overlap (between VaR and SVaR observation periods) should also be avoided in such cases too. Industry suggests that firms using a longer VaR observation window should be allowed to exclude the current approved VaR observation window. This would achieve the PRA’s stated aim, while removing the assumption that all firms use a 12 month window for VaR.

Industry is of the firm belief that monitoring the relationship between VaR and SVaR on a regular basis continues to be a useful risk management tool, since it highlights relevant portfolio dynamics that Risk
Managers could use in their day-to-day job (irrespective of the length of the VaR observation period); furthermore, as part of their internal analysis for evidencing model appropriateness, firms should monitor circumstances where the recent 12 months observation period could generate the highest SVaR charges.

Such analyses should continue to contribute into constructive and regular dialogue between Institutions and Supervisors to foster to enhance risk management framework on an ongoing basis. At the same time, in line with the spirit of such guidelines and to prevent capital instability, firms should not be made to switch the SVaR periods they deem appropriate, which are determined through a rigorous control framework.

We would also like to highlight that conducting a stressed window selection over a period which already includes 14 years and which will continue to increase represents an ever-increasing operational challenge (both in terms of maintaining old market data and in terms of the sheer operational complexity of calculating SVaR for all candidate windows). Thus, we recommend that the PRA revisit the requirement for firms to include the full period since 1 Jan 2007 in the observation window. One option would be to allow firms to use a number of shorter observation windows covering stressful periods (e.g. the financial crisis, the sovereign debt crisis and the Covid market volatility) and select the stressed VaR window using these periods.

**Recommendations:**

- Firms that use a longer VaR observation window should be allowed to exclude the current approved VaR observation window from SVaR.
- To reduce the operational challenges for banks, we suggest the PRA revisit the requirement for firms to include the full period since 1 Jan 2007 in the observation window. One option would be to allow firms to use a number of shorter observation windows covering stressful periods (e.g. the financial crisis, the sovereign debt crisis and the Covid market volatility) and select the stressed VaR window using this period.

Appendix:

1) Proposed text for 2.7A using average of previous 3 months to reduce pro-cyclicality without a requirement for a weekly calculation.

2.7A The PRA expects that RNIV own funds requirements should be calculated at quarter-end as the average across the preceding twelve weeks of an RNIV measure calculated weekly or the average of the preceding three months if calculated monthly. 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 monthly, 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 monthly.
2) Proposed text for 2.7A with weekly calculation as the default but with the operational simplifications proposed by the industry.

2.7A

i. The PRA expects that the own funds requirements for the most material RNIVs 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.

ii. For less material RNIVs, the own funds requirement may be calculated as an average of an RNIV measure at three month-ends, or as a single quarter-end RNIV measure. Monthly calculation is permitted where the own funds requirement for each RNIV is less than £A million and the total own funds requirement for RNIVs calculated monthly is less than £B million. Quarterly calculation is permitted where the own funds requirement for each RNIV is less than £C million and the total own funds requirement for RNIVs calculated quarterly is less than £D million.

iii. In cases where a firm does not meet the quantitative thresholds in (ii) but 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.

iv. Notwithstanding the frequency with which the RNIV measure is calculated, inputs to the calculation which do not depend on the firm's positions (such as time series of historical market moves, or calibrated volatilities and correlations) may be updated less frequently (but at least quarterly). Inputs which reflect the firm's positions must be updated every time the RNIV measure is calculated.