Consultation Response

PRA CP17/19

Counterparty credit risk: Treatment of model limitations in banks’ internal models

October 21, 2019

The International Swaps and Derivatives Association (ISDA), Association for Financial Markets in Europe (AFME), and UK Finance (collectively, the Industry) welcome the opportunity to comment on the PRA Consultation Paper (CP) entitled Counterparty credit risk: Treatment of model limitations in banks’ internal models – CP17/19.

Industry Comments

The consultation raises two specific issues that the PRA is focussed on with respect to model limitations in banks’ internal models: variability in the approaches banks use to comply with Article 286(4), and model risk that may arise specifically from recognising excess collateral. As such, the PRA has proposed to track model limitations and assumptions to help improve comparability, help ensure a level playing field between firms, and to manage model risk through the introduction of an exposure floor.

Tracking model limitations and assumptions

The industry is in principle supportive of the PRA’s proposals for each firm to maintain a single, central inventory of limitations and assumptions which may affect the output of the IMM and the objective consistency across firms. However, we believe the proposal for the central inventory to include all model limitations and assumptions as currently specified to be unduly onerous. The PRA proposal would require a disproportionate amount of time and resource spent on identifying and recording limitations and assumptions which are not meaningful in contributing to model outputs. We believe the central inventory would be a better tool if it only contained limitations and assumptions that drive a meaningful change in the model output.

Regardless of the approach taken, it should also be recognised that the creation of a single, central inventory will require significant investment in systems, time and effort. We therefore ask that the industry is given sufficient time to take action e.g. 18-24 months.

In relation to expectations relating to methodologies used to quantify impact, the frequency of the assessment or the level at which a model deficiency is deemed sufficiently material to warrant application of a capital add-on, we are supportive of the PRA not proposing a one-size-fits-all approach, thereby recognising that the IMM framework embeds a large number of assumptions and that estimates vary in frequency and methodological rigour based on their likely materiality. However, the proposed text in the CP is prescriptive in the need to challenge the quantification of the impact of assumptions relative to other plausible assumptions. We believe this prescription is unnecessary and would enforce a requirement which may be disproportionate relative to the estimated impact and in the case where quantification models are used, would not allow for estimates to vary in frequency and methodological rigour based on their likely materiality.
We have included proposed amendments below to Paragraphs 2.4 of the draft proposals and Paragraph 4A.3 of the draft Supervisory Statement to address the issues noted:

**Paragraph 2.4**

The PRA proposes that all model limitations and assumptions which may affect the output of the IMM in a meaningful way should be included in a single, central inventory, with details of any controls and other monitoring that mitigate or control the potential impact of the limitation or assumption, with an assessment of their potential impact on the key model outputs of exposure and capital requirements. An example of a (non-exhaustive) list of the types of limitations and assumptions which the PRA would expect to be monitored is included in the Appendix. The PRA proposes that firms should estimate the potential impact of limitations and assumptions, which are deemed to pose significant residual risk after application of controls, on model outputs on a periodic basis, and that firms should hold capital against them where the potential impact is material.

**Paragraph 4A.3**

The PRA expects that firms should have in place a process for estimating the potential impact that limitations and assumptions may have on the key model outputs of exposure and capital requirements. The impact of a model assumption should be assessed relative to plausible alternative assumptions. The sophistication of the methodology used and the frequency of estimation, should be commensurate with the materiality of the limitation or assumption. Where if quantitative models are used then these should be reviewed by a team independent from the model developer. Where the potential impact of an assumption or limitation on the total CCR capital requirement calculated using the IMM is material, firms should apply a prudent capital add-on in order to compensate for the risk. The PRA expects that firms should have Capital add-ons for model limitations may be offset against other model risk-related capital add-ons, for example any capital buffer derived through backtesting, only to the extent that they can be clearly shown to derive from the same underlying limitation.

In relation to the PRA’s concern regarding variability in how firms comply with Article 286(4), we would like to emphasise the importance that is placed on ensuring relevant formal processes are in place to ensure senior management are aware of model limitations, assumptions and the impact these can have on reliability of the output. In this regard, we note that the PRA has not specified the processes that each firm should have in place and we believe an element of variability should be expected to reflect the inherent differences in profile and structure of each firm and the need for each firm to tailor its processes to best fit its specific business model. In addition, the appropriateness of governance and processes are reviewed as part of the model approval process, both internally and by the PRA, and on a periodic basis thereafter. As such, whilst we are supportive of improving comparability and a level playing field, we believe that the PRA’s existing approach to considering the governance arrangements on a firm by firm basis is appropriate.

**Managing model risk through an exposure floor**

The PRA has proposed a floor to limit the recognition of exposure reduction through the exchange of initial margin for uncleared derivatives where the initial margin (IM) is calculated based on an initial
margin model in accordance with chapter I, section 4 of Commission Delegated Regulation (EU) 2016/2251. The floor is functionally similar to the SA-CCR multiplier but recalibrated for use in IMM. This has been introduced to allay concerns regarding model limitations and assumptions in the presence of initial margin collateral whose amount is determined through a model, as specifically allowed under the uncleared margin requirements, and based on the proposal that initial margin received outside chapter I, section 4 of the Commission Delegated Regulation (EU) 2016/2251 or the equivalent third-party regulation would not be subject to this floor.

As a general matter the industry does not support the inability to fully offset cleared or non-cleared derivatives exposures with IM. Collateral must meet certain conditions to be deemed eligible collateral, such as ensuring the collateral per CRR Article 197-199, and in addition other criteria such as ensuring the collateral is not materially positively correlated with the exposure is mitigating against per CRR Article 207(2). As such, the introduction of a floor limits the recognition of eligible collateral which could in economic risk terms fully offset the exposure at default. Therefore, it is important to consider whether a prescribed floor would be fit for purpose. In particular, the floor:

- Could create an unlevelled playing field. For example, the ECB does not prescribe any floor. Requirements that are super-equivalent to those imposed by the ECB and other jurisdictions could create additional costs to businesses operating in the UK, with impacted businesses operating at a competitive disadvantage internationally;

- Could distort the natural sensitivity of the EEPE to underlying risk factors. An additional trade that would increase the unfloored EEPE could potentially decrease or impact very little the collateralized EEPE (e.g. a trade with high MTM but very low volatility is added to the portfolio). Additionally, the floor would create more frequent cases of opposite sensitivities between EEPE for Tier 1 capital and the credit limit use case where the floor would not be implemented (since most banks would want credit limit to be accurate and not overly-conservative by nature).

We believe that the floor should be considered only as a supervisory backstop tool to address model deficiencies, if identified by the PRA and are deemed material, where banks reflect initial margin amounts that are determined by a margin model according to chapter I, section 4 of the Commission Delegated (EU) 2016/2251 as mitigant in their exposure calculation. No floor should apply otherwise.

We believe there are adequate supervisory tools in place currently such as the Pillar 2 requirements via which fat tailed risks/zero capital concerns can be addressed. In addition looking forward there are further prescriptive proposals on the horizon such as the capital output floor which will provide a backstop specifically to cover these types of model related concerns. Although we would like to reiterate our opposition to any floor when looking at exposures collateralised with eligible collateral, we believe the level at which the floor is calibrated should be reconsidered. As per chapter 1, section 4 of the Commission Delegated Regulation (EU) 2016/2251 the Collateral amount is calculated at a 99th percentile. As such, there should be the ability to offset 99% of the exposure value i.e. set the floor at no more than 1% rather than the arbitrary level set as a PFE floor within SA-CCR. In addition, we will like to highlight that the proposed floor penalizes more the firms who use supervisory haircuts (as opposed to modelled haircuts) as there is conservatism already maintained in supervisory haircuts. Furthermore for simplicity and to avoid the double counting of conservative elements, a simple floor (not using the exponential function) might be more appropriate.

We appreciate that the PRA wants to ensure consistency across the function used under SA-CCR and the exposure floor in this CP. However, these same calibration points raised above are also applicable in the context of SA-CCR even though the larger issue within SA-CCR is the conservative calibration
of the aggregate add-on. In this regard, the Industry strongly suggests that the risk mitigation effect of IM needs to be better recognised within the Basel standards related to SA-CCR (bcbs279) and consistently implemented at regional level to ensure consistency and a levelled playing field.

Finally, as a proposed floor is to address concerns relating to model risk, it should be noted that a level of conservatism is already maintained in the IMM framework relating to model risk through application of the alpha factor. As such, we ask that the PRA consider the ability for firms to apply an alpha factor of less than 1.4 in accordance with Article 284(9) to offset any double counting of model risk.

The industry is available to engage further with the PRA on this topic as required and would very welcome any additional discussions with PRA aiming at clarifying any potential model deficiencies that could have been identified specific to modelling of initial margin.

Kind Regards,

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