Internal Ratings Based (IRB) approach: clarifying PRA expectations

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1 Overview

1.1 This Prudential Regulation Authority (PRA) policy statement (PS) provides feedback to responses to Consultation Paper (CP) 5/17 ‘Internal Ratings Based (IRB) approach: clarifying PRA expectations’. It contains the final amendments to Supervisory Statement (SS) 11/13 ‘Internal Ratings Based (IRB) approaches’.

1.2 This PS is relevant to UK banks, building societies, and PRA-designated investment firms.

1.3 The proposals in CP5/17 sought to clarify PRA expectations for firms applying for IRB model approval as to:

- how they can demonstrate that they meet the requirements of the Capital Requirements Regulation (CRR) on ‘prior experience’ of using IRB approaches; and
- the use of external data to supplement internal data for estimating Probability of Default (PD) and Loss Given Default (LGD) for residential mortgages.

1.4 CP5/17 also proposed to set two reference points for estimating Probability of Possession Given Default (PPGD) for residential mortgages for firms that lack significant possession data.

1.5 Chapter 2 of this PS outlines the PRA’s feedback to the responses received during the consultation. Appendix 1 contains the updated SS11/13.

1.6 Having considered respondents’ comments, the amendments to SS11/13 are as proposed in CP5/17 with two additional clarifications that are outlined in paragraphs 2.5 and 2.9 of this PS. These clarifications relate to the calibration of margins of conservatism in PD and LGD estimation and to the monitoring of rating systems. The PRA does not consider these clarifications to have any additional material impact on firms, and so has not provided an updated cost-benefit analysis.

2 Feedback to responses

2.1 Before establishing its general policies and practices, the PRA is required by the Financial Services and Markets Act 2000 (FSMA) to have regard to any representations made to it, and to publish its response to them.

2.2 The PRA received seven responses to CP5/17. All respondents supported the objectives of the proposals. Some respondents raised concerns regarding the potential level of conservatism of the proposals. Others requested further clarity on specific aspects of the proposals. Specific areas where the PRA has amended or clarified the proposals are detailed in paragraphs 2.3 to 2.15.

Calibration of margins of conservatism in PD and LGD estimation

2.3 In CP5/17, the PRA proposed that additional margins of conservatism should be applied by firms with limited internal data that use external data as part of their estimation of PD and/or LGD for residential mortgages.

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3 (EU) No 575/2013.
4 Section 2N.
2.4 Several respondents requested further clarity on the calibration of the margins of conservatism when using external data to calculate PD and LGD and questioned whether the level of conservatism could be excessive. One respondent requested clarity on what is meant by ‘unobservable differences’ as a driver of additional conservatism for LGD.

2.5 The PRA has considered the responses and provides the following feedback:

- As stated in CP5/17, for the estimation of LGD, the PRA expects the main drivers of additional margins of conservatism to be: firms having limited direct recovery experience and less established recovery processes; differences in portfolio comparability between the external data and firms’ lending; and any unobservable differences.

- ‘Unobservable differences’ relate to risk drivers or risk characteristics that cannot be discerned from external data. These could, for example, include product pricing, marketing strategies, brand differentiation and underwriting standards. Paragraph 13.17B(c) of SS11/13 has been updated to clarify this.

- The PRA does not consider the expectation that firms apply appropriate margins of conservatism at every step when using external data in the calculation of PD to result in excessive conservatism. Margins of conservatism are required by the CRR to account for uncertainty in estimates. Levels of uncertainty are higher when using external data and therefore additional conservatism is appropriate and proportionate to address the additional uncertainty in cases where external data are used in PD estimation.

**Calibration of the PPGD reference points**

2.6 In CP5/17, the PRA proposed two reference points of 70% and 100% for estimating PPGD.\(^1\)

2.7 Several respondents challenged the calibration of the two reference points. Some respondents felt that the proposed reference points were too conservative and should be no higher than 40% or the previous Financial Services Authority (FSA) benchmark of 35%. One respondent stated that the reference point calibration should distinguish between firms using 90 days past due or 180 days past due in their definition of default. One response stated that the PPGD reference points should vary according to the loan-to-value (LTV) of the exposure.

2.8 The PRA has considered these responses and provides the following feedback:

- The two PPGD reference points are reference points and are not floors. Deviations from the reference points may be appropriate on a case-by-case basis if a firm can justify the prudence of a different reference point.

- The reference points are calibrated to a conservative level as they are intended to be applied by firms with low levels of internal default and possession outcome data. The previous FSA benchmark was designed as a back-stop for mainstream business lines. By contrast, these reference points need to be prudentially suitable for firms potentially focussed on non-mainstream business lines (including but not limited to high LTV mortgages, interest only mortgages, buy-to-let mortgages, second charge mortgages, or lending to customers with adverse credit histories), in high risk segments, or where

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1 The PRA considers a reference point of 100% to be appropriate where there are very low default volumes, regardless of the length of observed outcomes; and a reference point of 70% to be appropriate where firms are able to demonstrate they have greater, but still not considerable, volume and history of data to estimate future possession rates.
validation is more difficult. This is an example of where pre-engagement with the PRA during the IRB model review process can improve clarity and understanding.

- The calibration of the reference points was based on data from a mix of firms, some of which use 90 days past due and some of which use 180 days past due in their definition of default. It cannot be assumed that the reference points are not suitable or too conservative depending on the definition of default used by any given firm. However, the use of 90 or 180 days past due could be one justification for a deviation from a reference point.

- The PRA does not intend to set different reference points for each LTV band, as this would make the framework overly complex. The LTV level of a firm’s lending could be another justification for a deviation from a reference point.

- As set out in CPS/17, indicators supporting a PPGD level set higher than 70% include: high LTV lending; non-owner occupied lending (ie buy-to-let); and quantities of default data towards the lower end of the mortgage lenders cohort. Indicators supporting a PPGD level set lower than 100% or 70% include: low LTV lending; high share of owner-occupied lending; and more data than typical of the cohort.

Other responses

2.9 In respect of the experience test, one respondent requested further clarity on the types of evidence the PRA would expect firms to submit in order to demonstrate the ability to monitor rating systems. The PRA considers that the monitoring of rating systems can include the use of provisioning models, scorecards, and rating assignment processes. Paragraph 10.6C of SS11/13 has been updated from the version proposed in CPS/17 to reflect this point. This is an example of where pre-engagement with the PRA during the IRB model review process can improve clarity and understanding.

2.10 One respondent requested further guidance on the types of data that could be used to calculate forced sale discount (FSD). As stated in CPS/17, the PRA considers that a firm’s FSD modelling could initially rely on external data, along with an internal expectation on costs and an appropriate margin of conservatism.1 The calculation of FSD is also an example of where pre-engagement with the PRA during the IRB model review process can improve clarity and understanding.

2.11 One respondent asked whether European Data Warehouse and/or Bank of England loan level data can be used as a source of external data for the estimation of PD and LGD. The PRA considers that the representativeness, rather than the source, of the data is key. Firms will be expected to demonstrate that any external data they propose to use is representative of their lending.

2.12 One respondent requested further detail on the potential roll-out of the expectations on the use of external data to other exposure classes beyond residential mortgages, and an indicative timetable. The PRA will consider the application of the expectations to other exposure classes on a case-by-case basis. The PRA believes that the key determinant of the applicability of the proposals to other exposure classes is the availability of representative

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1 SS11/13 already includes a UK retail mortgage property sales reference point of a 40% average reduction in property prices from the peak price to be used in the estimation of downturn LGD. PRA PS13/17 also introduced a PRA expectation of a 25% fall in house prices. These house price fall supervisory expectations help mitigate prudential risk and can inform firms’ calculation of FSD.
external data. Firms will be expected to demonstrate to the PRA the representativeness of external data for the exposure class in question.

2.13 One respondent requested further clarity on the PRA’s new modular IRB application approach and the timetable for PRA approval of models. An overview of this approach was included in the PRA’s 2017 Annual Competition Report (ACR)\(^1\) that was published after the consultation period for CP5/17 closed. The key features of the modular application approach include: a shorter scoping phase; an indicative work plan with timescales for each module; a review of modules based on CRR categories of IRB requirements; feedback at various points so that the firm can undertake remedial work during the assessment; and an updated, clearer application pack with documentation requirements for each module.\(^2\)

2.14 One respondent argued that it was important to improve the risk sensitivity of the standardised approach (SA) to credit risk. The PRA supports this view and has advocated for changes to improve the risk sensitivity of the SA in discussions at the Basel Committee on Banking Supervision.

2.15 One respondent argued that many building societies undertake significant higher LTV lending due to a commitment to first-time buyers and to niche borrowers that are not adequately serviced by the mainstream market. The respondent argued that it is not desirable in public policy terms to make all lenders shift to low LTV and plain vanilla lending. The PRA notes that it is not the intention of any of the proposals to require or incentivise firms to change the nature of their lending. The aim of the proposals is to clarify the PRA’s expectations for firms applying for IRB model approval whatever the nature of their lending. The decision to apply for such a permission remains with each individual firm.

**Implementation**

2.16 The amendments to SS11/13 apply with immediate effect. They will apply to any IRB model application received after publication of the updated SS11/13, and also to IRB applications that have been received by the PRA prior to that date but for which a PRA approval or rejection decision has not yet been taken.

2.17 The PRA does not consider the application date of the IRB expectations to be burdensome on firms. The clarification of PRA expectations in respect of specific areas of the CRR IRB framework should improve the ability of firms currently using SA to understand how they can move to IRB. The clarifications do not impose new or additional burdens on firms.

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Appendix

1  Supervisory Statement 11/13 UPDATE ‘Internal Ratings Based (IRB) approaches’, available at:
   www.bankofengland.co.uk/pra/Pages/publications/ss/2017/ss1113update2.aspx.