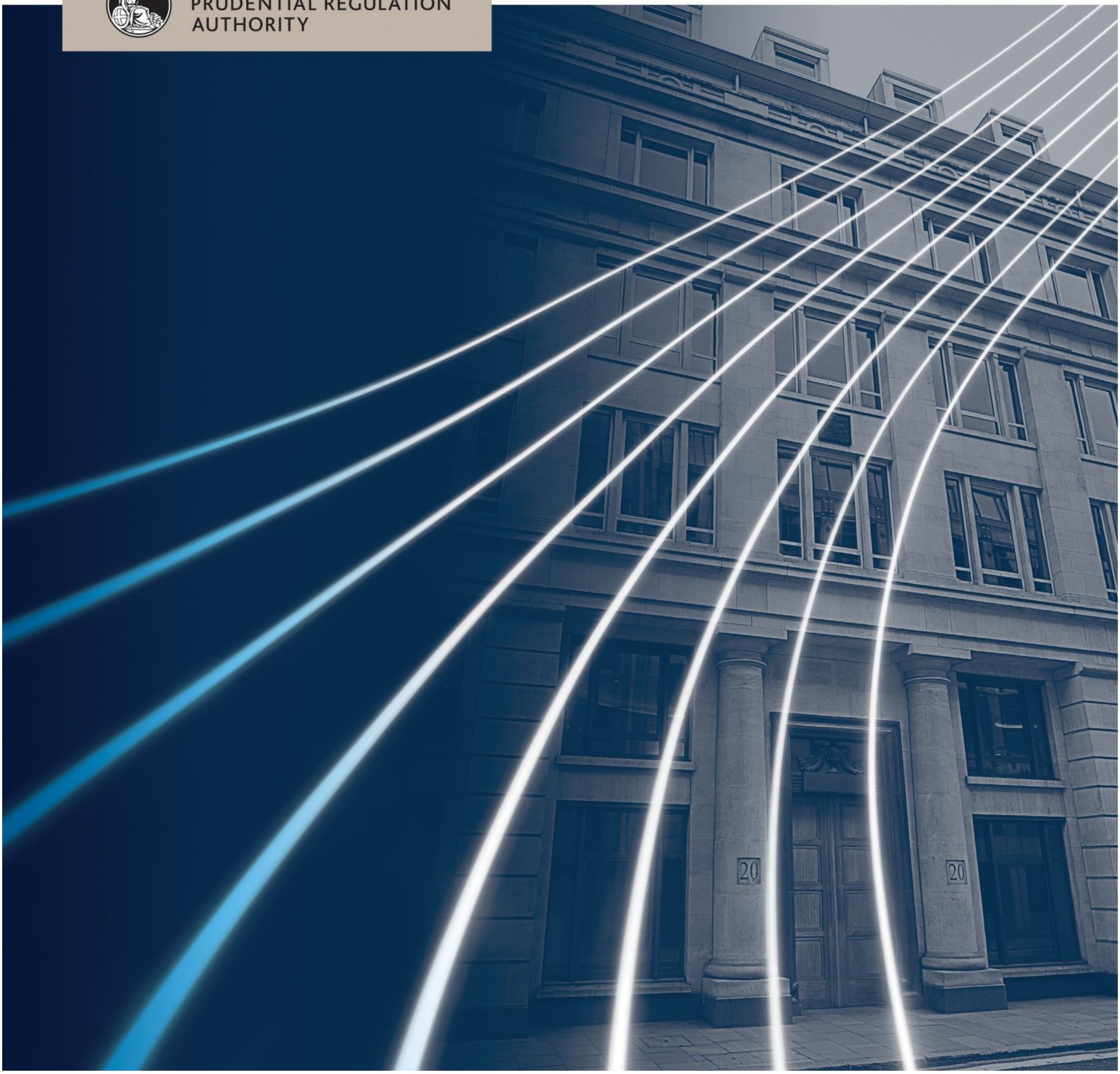
Policy Statement | PS13/17

Residential mortgage risk weights

June 2017

BANK OF ENGLAND
PRUDENTIAL REGULATION AUTHORITY



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1 Overview

1.1 This Prudential Regulation Authority (PRA) policy statement (PS) provides feedback on responses to Consultation Paper (CP) 29/16 'Residential mortgage risk weights'.[1] The CP set out proposed changes to the calculation of risk-weighted capital requirements in relation to residential mortgage portfolios.

1.2 This PS is relevant to banks and building societies that use the Internal Ratings Based (IRB) approach to calculate credit risk capital requirements for residential mortgages.

1.3 This PS contains the final amendments to Supervisory Statement (SS) 11/13 'Internal Ratings Based (IRB) approaches'.[2]

1.4 Following consideration of respondents' comments, the PRA has made several changes to the draft amendments to the SS contained in Appendix 1 of the CP. These changes are explained in Chapter 2. The changes extend the timetable for firms to meet the new expectations, amend the definition and formulation of cyclicality, clarify the application of the cyclicality cap to historical modelling, and emphasise the PRA expectation that firms should use margins of conservatism where there are low historical data.

1.5 In line with the approach adopted in the CP, the PRA has also decided to re-number paragraphs in the SS which follow inserted and deleted paragraphs.

1.6 The PRA does not consider that the changes made to the proposals contained in the CP are significant enough 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 an account, in general terms, of those representations and its response to them.[3]

2.2 The PRA received nine responses to CP29/16. Most respondents supported the broad aim of the proposals, but a number of issues were raised and some sought greater clarity on certain aspects of the PRA's revised expectations. Specific areas where the PRA has amended the proposals are detailed in paragraphs 2.3 to 2.18 below.

Timetable

2.3 In CP29/16, the PRA had proposed that firms should meet the revised expectations by the end of March 2019, with firms having until the end of May 2018 to submit adjusted models for regulatory approval.

2.4 A number of respondents felt that this timetable would be challenging. Firms pointed out that there were a number of other developments impacting the IRB framework which were likely to require considerable effort in the same time period.

1 July 2016: www.bankofengland.co.uk/pra/Pages/publications/cp/2016/cp2916.aspx.
2 June 2017: www.bankofengland.co.uk/pra/Pages/publications/ss/2017/ss1113update.aspx. SS11/13 is also subject to consultation in PRA CP5/17 'Internal Ratings Based (IRB) approach: clarifying PRA expectations': www.bankofengland.co.uk/pra/Pages/publications/cp/2017/cp517.aspx.
3 Section 2L.

2.5 The PRA has considered the issues raised by respondents, and has decided to amend the timetable such that firms should meet the new expectations by the end of 2020.

2.6 Firms should speak to their supervisors well in advance of this time to agree the date by which they will submit amended models for regulatory approval. In the meantime, applications from firms for IRB model changes based on the previous version of SS11/13 will be considered, provided that the applications include credible plans to implement these revised expectations by the end of 2020.

30% cyclicality cap and calculation

2.7 Residential mortgage probability of default (PD) models range across a spectrum between those known as point-in-time (PiT) and those known as through-the-cycle (TtC). CP29/16 proposed a 30% cap on the level of cyclicality, that is, how close a model is to the PiT end of the spectrum that firms can assume when calculating long-run average default rates.

2.8 A number of respondents questioned how this cyclicality cap would work in practice and requested more information on the methodology for applying it.

2.9 The PRA has considered these requests, and has decided to expand paragraph 12.4 of SS11/13 to explain that the cyclicality cap is the PRA's expectation of what firms should assume is the maximum level of cyclicality when imputing missing historical default rates. If 30% of the change in portfolio default rates comes from grade migration, the remaining 70% would come from changes in default rates within grades. Therefore, when calibrating the long-run average default rate for a rating grade, the PRA expects firms to assume that at least 70% of the portfolio change in default rate reflects grade level changes in default rates.

2.10 In order to illustrate this, a stylised example showing the application of the cap is included as Appendix 2 of this PS.

Calculation of cyclicality

2.11 CP29/16 proposed that firms should be aware of the cyclicality of their rating systems to enable them to calibrate, monitor and stress test their systems. It included two alternative formulae for defining the cyclicality of a rating system.

2.12 Responses to the consultation requested more guidance on the PRA's definition of cyclicality and questioned whether the two formulae might generate different results.

2.13 The PRA agrees that the inclusion of two formulae could potentially lead to confusion and the PRA considers that including a single formula with an expanded explanation of cyclicality should provide firms with a better understanding of the PRA's expectations in this regard.

2.14 The PRA has removed the first formula and in paragraph 12.3 of SS11/13 has explained that the cyclicality of a rating system is a measure of the degree of responsiveness of the rating system to economic changes. At one extreme a fully cyclical rating system (or 'point-in-time') would see an economic downturn picked up through the migration of exposures to lower rating grades and therefore no increase in default rate within a grade. At the other extreme a non-cyclical (or 'through-the-cycle') rating system does not respond to an economic downturn with grade migration, but the default rate within a grade increases instead.

Low historical data portfolios

2.15 In CP29/16, the PRA proposed that low historical data portfolios should contain a degree of uplift in PDs relative to prime portfolios.

2.16 Respondents questioned what the PRA meant by this and whether in fact the outcome would be that these portfolios could not be modelled under the IRB approach.

2.17 The PRA believes that residential mortgage low historical data portfolios can still be modelable under the IRB approach. The PRA has now referred expressly to the need for an additional margin of conservatism, so that firms will have a better understanding of how the PRA's expectation for an uplift in the PDs of these portfolios relative to comparable prime portfolios can be met.

2.18 The expectation in paragraph 10.16 of SS11/13 that long-run average PDs are appropriately conservative has been changed to include the more explicit expectation that they should include an appropriate margin of conservatism.

Other responses

2.19 Some respondents questioned whether the early 1990s is still an appropriate downturn period from which to take data for calculating long-run average default rates for current portfolios and whether macroprudential measures taken by the Financial Policy Committee will mitigate the risk of a downturn of this scale. The PRA has considered this feedback and although it agrees that the UK mortgage market has evolved since the early 1990s,and that the use of new macroprudential measures should help to reduce a risk of a recurrence on this scale, it continues to believe that the early 1990s represents a realistic scenario of a downturn in the UK residential mortgage market.

2.20 There was also a challenge from a number of respondents as to whether changes should be made to the variable scalar approach[1] that might address the deficiencies in risk capture that have been identified. The expectation that firms should move their portfolios away from the variable scalar approach is based on the PRA's experience that, for residential mortgages, such models are unable to address the deficiencies in risk capture identified in the CP.

2.21 There was a challenge as to whether the proposed minimum 25% fall in house prices to be used in calculating downturn loss given default was consistent with other downturn parameters and whether the sole use of peak to trough as opposed to using long-run real house prices or the house price to earnings ratio might lead to cyclicality in the downturn loss given default (LGD). The PRA does not believe that a wide range of approaches to identifying UK house price fall assumptions is justifiable, and that the proposed 25% minimum represents a reasonable approach in the light of past experience. In a downturn, repossessions are more likely to arise on houses that were purchased at the peak, so peak to trough remains the most appropriate measure.

2.22 Respondents also questioned how the 25% floor would take into account regional characteristics and in particular what the treatment would be where there are differences in peak to trough dates between different regions in the United Kingdom. In its response the PRA believes that there is nothing in its expectations to prevent firms from having different LGD

1 In the UK firms use a TtC approach known as 'variable scalar' that use as inputs the PDs derived from relatively PiT models. Variable scalars then transform the average PiT PD for a portfolio into a static TtC PD, by using a multiplier, or scalar, that varies through time.

models for different regions of the United Kingdom, where there are material differences to justify it.

2.23 Overall, the PRA, after taking all responses to the CP into account, considers that no additional information has been raised to justify amending the draft SS beyond the substantive changes detailed in paragraphs 2.3 to 2.18 above, other than to make some additional consequential changes to ensure consistency. The latter have resulted in the deletion of those sections within paragraphs 12.14-12.27 on 'variable scalar considerations for retail portfolios' that related to residential mortgages.

Appendices

1	**Supervisory Statement 11/13 UPDATE 'Internal Ratings Based (IRB) approaches', available at: www.bankofengland.co.uk/pra/Pages/publications/ps/2017/ps1317.aspx**
2	**Stylised example of the application of the cyclicality cap, available at: www.bankofengland.co.uk/pra/Pages/publications/ps/2017/ps1317.aspx**