

## Residential mortgage downturn LGDs - recent work

September 2006

1. This is a draft memo communicating the outcome of our recent work on downturn residential mortgage LGDs. The final version will be issued at the 2nd October Credit Risk Standing Group.

### **Memo**

2. This memo follows our presentation on downturn LGDs for residential mortgages at the 14th August Credit Risk Standing Group.
3. Under the IRB approach BIPRU requires LGD parameters to be estimated using both historical experience and empirical evidence, and not based purely on judgemental considerations. And where data availability is poor, firms should add an appropriate margin of conservatism to their estimates.
4. However, the FSA recognizes that at this early stage, the available data may not be sufficient for all firms to use historical data to form a judgement on the appropriate estimates for an economic downturn. This has been evidenced in our recent analysis that shows a wide variation in firms' downturn assumptions.
5. Through the summer we conducted a Hypothetical Portfolio Exercise (HPE). Participating firms were asked to calculate LGD and other supporting data for each exposure on a portfolio of 10,000 UK prime residential mortgage exposures. The portfolio had a simple average indexed LTV of slightly over 50% with no exposures in arrears, and represented a regionally distributed portfolio of different property types. We are very grateful to the 12 firms that participated in the exercise. The downturn results as recently sent to participating firms are included in the Appendix to this note.
6. In the HPE responses, we observed large variations in firms' estimates of 2 key downturn parameters; reduction in property value (as measured by the reduction in sales price from current indexed value), and probability of possession given default (PPD). Firms' estimates of downturn PPD (as measured by a simple average across the hypothetical portfolio) ranged approximately from 10% to 100%. Firms' average reduction in property sales price (also calculated as a simple average across the portfolio) ranged approximately from 30% to 70%.

The papers and meetings of the group are intended to encourage useful discussion of the issues rather than to present a comprehensive account of the matters concerned or a set of agreed conclusions. The minutes of the meetings report the discussions of the group, but neither the papers or minutes nor any reported remarks by anyone present at one of those meetings should be read as representing formal positions of the institutions represented or of the FSA. The FSA's Handbook proposals will be subject to consultation in the normal way.

7. As a result of this, and other analysis, the FSA considers that a review of these key drivers of LGD will be useful in informing our discussions with firms during the IRB review process.
8. We believe that, at this point in time and reflecting current market conditions, an average reduction of 40% in property sales price forms an appropriate reference point when assessing downturn LGD for mortgage portfolios.

We have examined the evidence for an appropriate PPD reference point, where the evidence is more difficult to assess. The HPE study demonstrated a median value of approximately 35% for PPD on the hypothetical portfolio with a wide variation around that figure. While we believe that the HPE results will be useful in guiding our review work, perhaps as a point of reference, we also recognise that firms will need to support their PPD estimates through careful analysis and interpretation of the available data. Our study demonstrated that, for many firms, PPD estimates tended to vary strongly with LTV, meaning that PPD estimates might vary from portfolio to portfolio.

9. The aim of disseminating the results of the hypothetical portfolio study is to help inform our discussions with IRB firms, especially at this early stage, and to help us understand the legitimate variation in firms' circumstances, portfolios and LGD estimation approaches. The BIPRU requirement that firms arrive at their own soundly based parameter estimates is unaffected.
10. As firms improve their estimation techniques, and the available data increases, we expect both our own, and industry thinking on this topic to evolve.

## Appendix – Downturn un-floored LGD results returned to HPE participants

Data item	Number of responses included	Simple Average	Median	Standard Deviation
Property value (current)	12	£202,777	£203,015	£2,065
Property sale price (downturn)	10	£113,828	£111,854	£24,698
Property haircut as % of current indexed value*	10	44.1%	44.9%	12.1%
Probability of possession given default	11	43.8%	35.7%	25.0%
Time from default to sale (months)	11	22.53	24.00	7.28
LGD	12	12.9%	13.2%	5.8%

\*i.e. this refers to the ‘all-in’ haircut incorporating both the downturn scenario and forced sale discount.

Where the number of firms included in the average is less than the number of participants, one or more participant has been removed from the average either because that participant did not provide the data, or on the basis that it would not be meaningful to include their submission in the average.