IRB Mortgage Component-level Survey 2024

Converging trends in Hybrid mortgage model suites

November 2024

pwc

Executive summary

Introduction

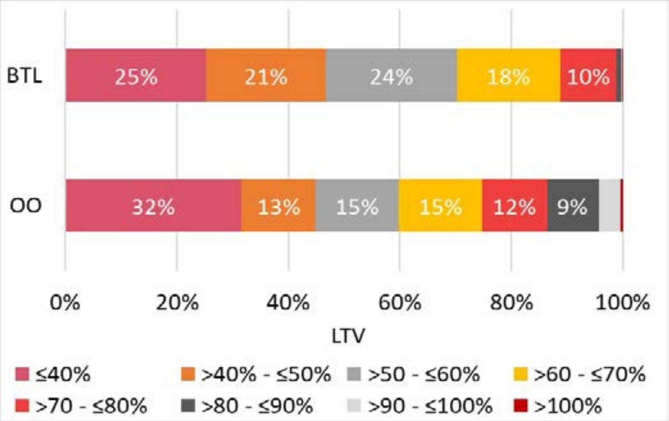
The industry is continuing to face challenges over Internal Ratings-Based (IRB) Hybrid model suites for residential mortgage portfolios. A majority of firms are still waiting on the final outcome of their regulatory submissions, with multiple rounds of feedback received, whilst continuing to hold sizeable temporary model adjustments (TMAs).

The Prudential Regulation Authority (PRA) is currently hosting a series of roundtables aimed at addressing industry-wide challenges and clarifying their expectations, where possible.

In light of these developments, as well as interest from firms for greater granularity in the key drivers of risk weight (RW) variability for mortgages, PwC has performed a component-level market survey, following on from our recent Hybrid IRB risk-weight snapshot survey.

Survey participants

A total of 12 firms have participated in this survey, covering Owner-Occupied (OO) and Buy-to-Let (BTL) lending, with all firms having received at least one round of formal feedback from the PRA on their IRB model submissions.



Participants have a higher LTV distribution for their BTL portfolios in comparison to OO

Figure 1. Bar chart shows LTV exposure distributions of participants.

Key RW components uncovered in the survey

This survey aims to understand how continuing variability in RWs can be attributed to underlying components across Probability of Default (PD) and Loss Given Default (LGD) models, and identifying where firms are starting to converge in model outcomes. Key components captured in the survey include:

Portfolio level

- Risk Weights, PD, LGD, Margins of Conservatism (MoC) and TMAs.

Probability of Default

- End of term risk, central tendency, cyclicality and rating system concentration.

Loss Given Default

- Probability of Possession given Default (PPGD), Forced Sale Discount (FSD), Time to Sale (TTS) - outputs, model structures, segmentation and treatment of outliers.

Benchmarking highlights

The survey has considered the underlying drivers of the new Hybrid mortgage model suites, with a summary of the trends outlined below. We will be happy to discuss more detailed results with you.

15% **25%**
Average RWs for OO and BTL

4
property limit to define portfolio landlords adopted by most

1.2x
Average central tendency is 1.2x higher for BTL portfolios

Over time, OO cyclicality has increased for participants, whereas BTL has slightly decreased

Hybrid PD is generally not sensitive to LTV, other than at the extremes

All firms use a consistent economic cycle for Through the Cycle (TtC) periods, but Point in Time (PiT) periods vary based on internal data availability

25%+
max risk grade concentration observed in spite of feedback

50%
of firms include outliers in LGD estimates (varies by component)

67%
of participants have separate in-default and not-in-default PPGD models

15%
Average PPGD is 15% points higher for BTL

10%
Average FSD is 10% points higher for BTL

3 - 4yrs
average TTS (driven by time from default to possession)

30%
Impact of MoCs on BTL is 30% higher than OO

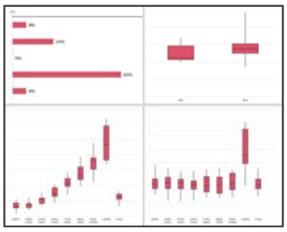
How we can help

How we can help

We are supporting a number of current and aspirant IRB firms with their IRB model applications, leveraging our extensive experience to perform **targeted model reviews pre-regulatory submission**, as well as supporting **benchmarking of methodologies with market trends**. This includes, **in addition to the broader implementation support we provide**:

- Sharing **industry benchmarking insights on IRB RW and model outputs** and assessing the **appropriateness of conservatism** across model components.
- Providing **Board and senior management comfort** over the **plausibility** of the **submission** by assessing compliance against regulatory requirements.
- Gaining **further insights** into the **latest regulatory expectations** to **better prepare** for any **potential regulatory challenge,** especially on contentious matters that materially drive RWAs.
- Providing assurance through the **development of challenger models** using our toolkits.

Our market-leading IRB benchmarking and technology



IRB benchmarking

Our **market-leading benchmarking** provides in-depth insights into model components categorised by key risk drivers. This includes overall RW outputs by portfolio and LTV; PD and LGD parameters segmented by portfolio, LTV, and ID/NiD status; and LGD components detailing modeling approaches and parameter estimates.

Innovative tech. solutions to support model development and compliance

- **Model Efficiency Manager (MEM)** toolkit, our low-code, cloud-based platform that offers extensive data profiling, challenger model development, model monitoring, and semi-automated model documentation features.
- **Reg Bridge**, PwC's cutting-edge AI tool used to support regulatory analysis and attestation by translating core regulation into data requirements, calculation logic, decision trees, interpretations and associated documentation in seconds.

Contacts

Vivek Kadiyala
Director
+44 (0) 7711 589100
vivek.kadiyala@pwc.com

James Mankelow
Associate Director
+44 (0) 7802 660143
james.d.mankelow@pwc.com

Kishan Mistry
Senior Manager
+44 (0) 7841 468719
kishan.mistry@pwc.com

Tanveer Sidhu
Senior Associate
+44 (0) 7483 946763
tanveer.s.sidhu@pwc.com