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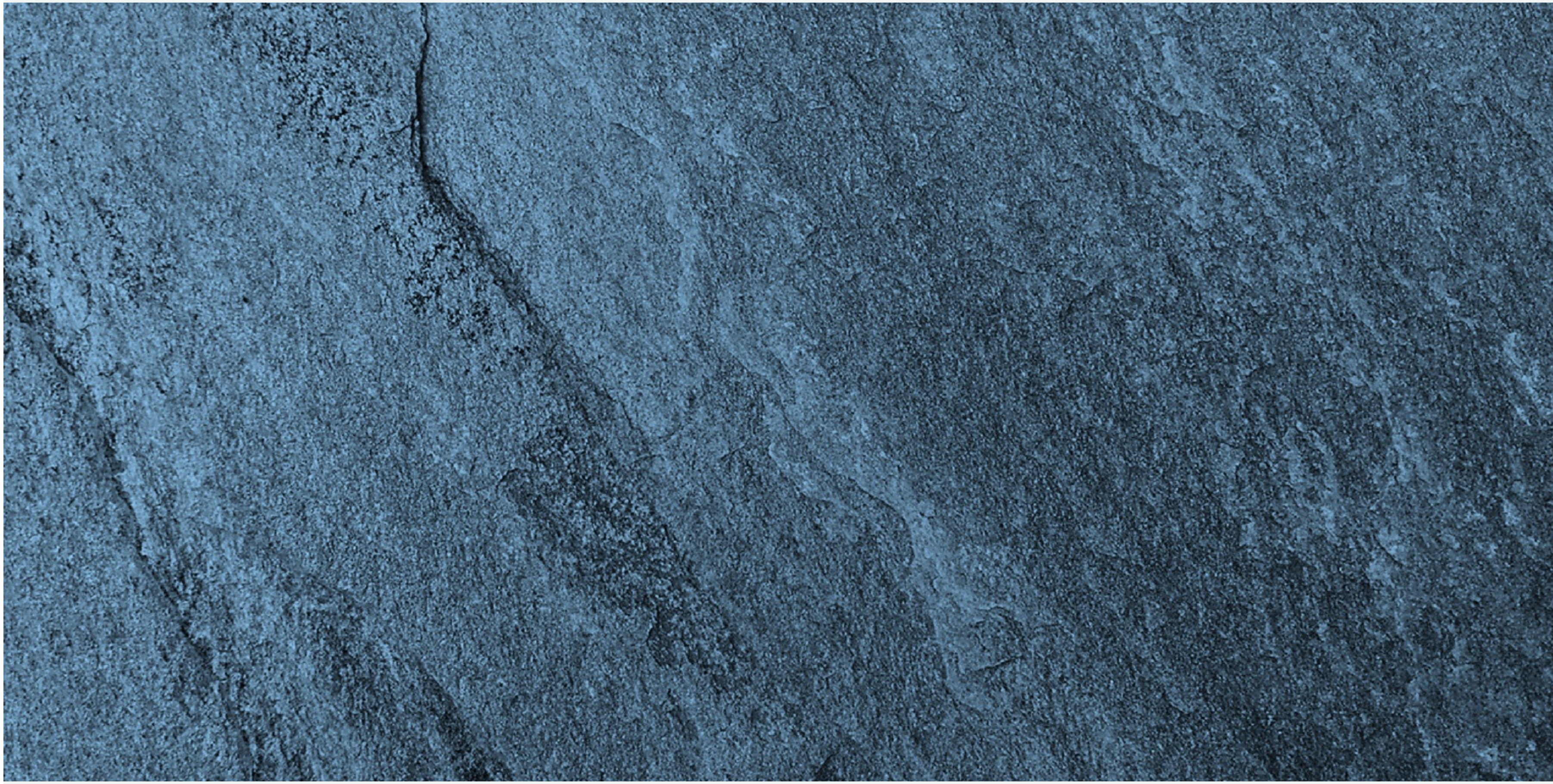

Managing the Impact of Interest Rate Rises on Credit Risk Models

A glance into the impact of rising interest rates

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Managing the Impact of Interest Rate Rises on Credit Risk Models

What does it mean for UK banks?

The UK economy is facing immense inflationary pressures with the Bank of England increasing the Base Rate on a near month-on-month basis to subdue rising prices. Banks face rising credit risk exposure as households and firms face increasing costs and debts, with banks having to swiftly recalibrate their models, processes and strategies to accommodate the new ever-changing landscape.

Background

- Current inflation rate stands at 10.5%, well above the Bank of England's target of 2%.
- Bank of England interest rate (Base Rate) rose by 0.5% to 3.5% in December 2022.
- Initial market forecasts revealed that the Base Rate would peak at 6.0% in 2023 to combat the rise in inflation. However, forecasts have calmed with market confidence returning, and the market predicting the Base Rate to peak around 4.5% this year.
- According to the Bank of England, inflation is expected to fall from the middle of 2023 largely due to the following reasons:
  - Energy prices are not expected to rise as quickly as they have previously done with the government providing additional support to households and businesses alike for 6 months.
  - Price of imported goods is not expected to rise so quickly as production difficulties across many industries are easing.
  - Demand for goods and services is expected to contract leading to prices stabilising.
- Despite some of the promising activities designed to mitigate the rise in inflation, the economy remains extremely fragile. The war in Ukraine will continue to affect the UK and global economy especially in the energy markets.
- The enduring cost of living crisis will have a profound effect on many households. Millions of UK families face increases of thousands of pounds per year on their mortgages between now and 2024.
- UK house prices are expected to fall by 8% in 2023 according to Halifax.
- Without clear foresight of the fiscal policies and available long-term government support packages especially for the most financially vulnerable, the path to recovery remains unpredictable. Households and firms are likely to see further financial distress before seeing improvements.

What does it mean for UK banks?

Credit risk impacts

Many of today's live credit risk related models were built on a benign economic environment with low interest rates.

Banks will need to adapt to the changing economic landscape and market to ensure financial stability, protect revenue streams, and understand implications on capital and provisioning whilst managing consumer welfare.

Below are some of the key areas and models impacted by the cost of living crisis and rising interest rates with recommendations for recalibration.

Area/Models impacted	Recalibration required	Capital impact	P&L impact
IFRS 9 ECL models	●●●	●●○	●●●
IRB RWA models	●●○	●●○	○○○
Stress testing models	●●●	●●○	●●○
Pricing models	●●●	●○○	●●●
Acquisition and behavioural models	●●●	●●○	●●●
Portfolio management (inc. credit risk appetite)	●●●	●●○	●●○
Early warning models	●○○	○○○	○○○

Low ○○○ High ●●●

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Current challenges and considerations

Many of the impacted areas and models may pose significant concerns for banks in terms of profitability, liquidity and capital. We briefly highlight some of the key areas banks should focus on with many of the models utilising forward-looking economic scenarios that have historically been built on a low-interest rate environment. Fintegral can help banks explore this new paradigm shift.

Areas/Models	Current challenges	Points to consider
IFRS 9 ECL models	• Models may not respond to changes in interest rates. • Stage 2 criteria may not effectively capture accounts that have significantly increased credit risk (SICR). • Existing IFRS 9 macroeconomic models may produce inaccurate and volatile outputs.	• Conduct impact assessments, sensitivity analyses and what-if analyses. • Review IFRS 9 staging criteria including SICR. • Review and update the macroeconomic scenarios including their weightings within the models. • Review whether existing management overlay methodologies and expert credit judgement (ECJs) are sufficient and if new overlays are required.
IRB RWA models	• IRB PD models usually being hybrid models may also be impacted by changes in borrower circumstances. • LGD models may require recalibrating to account for changes in asset recovery values.	• Closely monitor model outputs to changing economic environment and review to decide whether models require recalibration. • Review if existing post-model adjustments (PMAs) are sufficient and if new PMAs are required.
Stress testing models	• Macroeconomic scenarios may not capture the effects of rising interest rates and cost of living crisis.	• Review and update the macroeconomic scenarios.
Pricing models	• Product prices may not reflect the increased levels of risk adversely affecting income and profit levels.	• Review and update risk-based pricing and hurdle rates.
Acquisition and behavioural models	• Base Rate movement may result in customer behavioural changes which may not be reflected in existing acquisition and back book strategies.	• Recalibrate scorecards and affordability calculators. • Analyse behavioural changes in recent economic environment and revisit behavioural models.
Portfolio management (credit risk appetite)	• Borrowers may struggle financially leading to higher delinquencies and payment behavioural changes. • Risk appetite framework (RAF) and thresholds may not be reflective of new economic environment.	• Recalibrate risk appetite framework and thresholds. • Conduct sensitivity analysis on financial planning activities (ICAAP, RAF). • Review credit limits, collection and recovery strategies and resolution planning frameworks.
Early warning models	• Early warning indicators may not be effective in capturing changing risk levels.	• Develop new or update existing early warning indicators and thresholds.

How can Fintegral help you?

As a specialist firm, we believe in providing practical advice that is tailored to your specific situation, ensuring the solutions are feasible and sustainable.

Model risk management remains a core competency of our firm since its inception. With extensive experience and expertise across credit risk, climate risk, stress testing and enterprise risk, Fintegral can support you in your journey.

Fintegral specialises in the following:

- Model development
- Model recalibration
- Model risk assessment
- Model validation
- Model landscape review
- Individual model review
- PMA and model risk buffer assessments
- Model documentation
- Risk appetite framework
- Governance and policy frameworks
- Training and awareness

Contact

Fintegral

London ¦ Frankfurt ¦ Zurich

www.fintegral.com

Dilbagh Kalsi
Partner, Head of UK Practice
Fintegral UK Ltd.

+44 7703 788 016
dilbagh.kalsi@fintegral.com

Fintegral UK Ltd.
City Tower, 40 Basinghall St.
London EC2V 5DE
United Kingdom

Polly Wong
Manager
Fintegral UK Ltd.

+44 7956 795 141
polly.wong@fintegral.com

Fintegral UK Ltd.
City Tower, 40 Basinghall St.
London EC2V 5DE
United Kingdom

Sarada Bhasker
Manager
Fintegral UK Ltd.

+44 7494 885 102
sarada.bhasker@fintegral.com

Fintegral UK Ltd.
City Tower, 40 Basinghall St.
London EC2V 5DE
United Kingdom