

In the detail

INTEREST RATE RISK UPDATE



Annex: In the detail of the Basel Committee's proposals on interest rate risk in the banking book ...

The Basel Committee's proposals on a Pillar 1 capital framework for IRRBB are based on nine key components.

1. Interest rate shock scenarios

Banks will be required to run six interest rate shock scenarios, with the minimum Pillar 1 capital requirement measured by whichever scenario generates the largest decline in economic value and/or earnings.

The six scenarios are:

- i. parallel (along the yield curve) shock up
- ii. parallel shock down
- iii. short rates down and long rates up
- iv. short rates up and long rates down
- v. short rates up
- vi. short rates down.

Interest rate shocks are to be calculated for each material currency (representing at least 5% of a bank's assets or liabilities), based on the distribution of local risk-free rates at relevant maturities over the last 25 years, and a global parameter reflecting average observed volatility across all currencies. Local interest rate shocks must be at least 100 basis points, but will be capped at 500 basis points for short-term rate shocks, 400 basis points for parallel yield curve shocks, and 300 basis points for long-term rate shocks.

For the calculation of the impact on earnings, only the two parallel interest rate shock scenarios will be used.

2. Standard slotting into maturity buckets

This is straightforward for those assets and liabilities that can be allocated to maturity buckets depending on their contractual repricing maturities.

3. Non-maturity deposits

These are liabilities that the depositor is free to withdraw at any time. Some of these will behave in practice as long-term interest rate-insensitive liabilities (core deposits), while others (non-core deposits) will be sensitive to interest rate sensitivities (and will therefore be subject to repricing or replacement as deposit rates increase). Core deposits can be allocated across maturity buckets up to a five year maturity, while non-core deposits have to be placed in the overnight maturity bucket.

Banks will be required to separate out their retail and wholesale non-maturity deposits and to use either (a) a set of standardised allocations between core and non-core deposits, or (b) their own internal estimates of the proportion of core and non-core deposits, subject to a maximum proportion of core deposits and a minimum proportion of non-core deposits.

4. Other behavioural assumptions

Banks will be required to make some adjustments for customer behaviours in prepaying fixed rate loans, drawing down loan commitments, and early redemption of term deposits as interest rates change. This may be prescribed by the national supervisor; or supervisors may allow banks to make some use of internal estimates, subject to supervisory review and approval.

5. Automatic interest rate options

Banks with explicit or embedded interest rate options should calculate the value to the option holder of each sold automatic interest rate option, and each bought option used for hedging.

6. Calculation of economic value and earnings

A standard approach is proposed for the calculation of economic value, using risk-free discount rates. However, offsets will not be allowed for embedded gains and losses.

The general earnings measure is also standard, but excludes new business.

Basis risk can be calculated using either standardised or historical reference rate and gap risk shock parameters.

7. Minimum capital requirements

The consultation paper sets out four possible approaches to the calculation of the minimum capital requirement.

All of these approaches would require a bank to begin by undertaking separate calculations for each currency with material exposures, namely those accounting for more than 5 percent of either banking book liabilities or banking book assets. Some partial offsetting is then allowed across currencies if an interest rate shock would result in a bank facing a reduction in economic value/earnings in one or more currencies, but a gain in economic value/earnings in other currencies.

A bank would have to calculate the impact of each of the six interest rate shock scenarios on economic value (and the two parallel shock scenarios on earnings) and use the results of the scenario that generates the largest overall decline (aggregated across all material currencies) in economic value/earnings.

The minimum capital requirement would then be specified in one of four ways:

- i. A pure economic value calculation;
- ii. The higher of an economic value and an earnings calculation;
- iii. As in (ii), but with some allowance for the short-term offsetting of reductions in economic value by gains in earnings; and
- iv. As in (ii), but with allowance for a risk-based threshold under which a bank's 'net interest profit' (locked-in margins from net interest income on the banking book exceeding expenses and costs associated with banking book activities) would be deducted from the higher of the economic value and earnings calculations.

The consultation paper does not specify which type of capital a bank should hold in order to meet the Pillar 1 minimum IRRBB capital requirement. However, there are some scattered references to both CET1 and total tier 1 capital in the paper, with CET1 capital being the most likely outcome given the general direction of travel under Basel 3.

8. Enhanced Pillar 2 approach

Although set out only briefly and in a very high-level manner, the consultation paper also suggests that an 'enhanced Pillar 2' IRRBB framework could be used by banks as an alternative or a supplement to the proposed Pillar 1 framework. Banks with sufficiently strong internal models, risk management and controls could be permitted to use an internal models approach to the calculation of an IRRBB capital requirement. This would be subject to supervisory review and approval, the calculation and disclosure of the standardised Pillar 1 measure, and the ability of supervisors to determine a capital outcome that takes account of both the Pillar 1 and the enhanced Pillar 2 measures.

9. General IRRBB Principles

Finally, the consultation paper proposes an updating of the high-level principles for IRRBB that were first published by the BCBS in 2004. This includes proposed new templates for public disclosure by banks.

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[Evolving Banking Regulation Part 2 – Bank Structure: the Search for a Viable Strategy](#)

[The Changing Face of Regulatory Reporting: Challenges and Opportunities for Financial Institutions](#)

[Managing the Data Challenge in Banking](#)

[Evolving Banking Regulation \(EMA Edition\) – Chapter 4: Data and Reporting Aggregation](#)

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Produced by Create Graphics | Document number: CRT042180

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