

**EBA: LATEST DEVELOPMENTS
REGARDING TECHNICAL ASPECTS
OF IRRBB**

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2 ABSTRACT

Interest rate risk in the banking book ('IRRBB') is a particular area of interest for banks in the context of the European Banking Authority's ('EBA') plan to update the EU SREP framework in the coming years.

In order to implement the BCBS's update of its IRRBB standard in 2016, the EBA published a consultation paper on the 31 October 2017, designed to **update its IRRBB management guidelines from May 2015**.

The EBA's proposals aim to clarify and address a number of areas of improvement within eurozone banks. Compared to the 2015 EBA guidelines, the updated version will have **more requirements for IRRBB management** in terms of:

- IRRBB governance framework;
- Capital identification, calculation and allocation;
- Measurement of IRRBB; and
- Supervisory Outlier Test ('SOT').

The EBA's objective is to consult on the revisions in the first quarter of 2018, **targeting practical implementation by the end of 2018**.

This Briefing Note focuses on the implications of these latest developments for banks, highlighting areas that should be evaluated when addressing the requirements, considering all compliance operational issues.

3 HIGH-LEVEL OVERVIEW

Given its mandate to promote supervisory convergence, the EBA is implementing a progressive approach in developing its IRRBB related regulatory requirements ahead of the BCBS deadline.

The revised EBA Guidelines will initiate **the implementation of the new BCBS Standards, while also improving the existing EBA guidelines**; in particular in those areas where supervisors desire a more practical approach.

In the EBA's proposals, credit institutions are expected to treat IRRBB as "an important financial risk", considered under Pillar 2. Indeed, the EBA provides more details on the design of banks' IRRBB governance frameworks, measurement approaches in terms of components and methods, design of shock scenarios and assumptions, and how the results of the IRRBB assessment in different phases should be used and how should capital requirements be properly assessed.

According to our analysis, in our view, **several points remain to be clarified or adjusted**, such as:

- **The application date** still has to be confirmed to be 31/12/2018;
- **Additional technical constraints are added in the calculation process of the SOT** (as defined by the BCBS), for example the inclusion of interest cash flows; Further detail on the practical operation of these is needed.
- The Credit Spread Risk ('CSR') In the banking book is included in the IRRBB perimeter **but the definition remains broad and should be clarified**;
- **Ambiguities remain in the internal capital requirement**; notably some statements related to the definition and evaluation of the internal capital amount;
- **Requirements regarding inclusion of IRRBB in institutions' Risk Appetite Statements** (e.g. short-term and long-term impact of fluctuating interest rates on both earnings and economic value) are included but could be more specific in order to clarify supervisory expectations; and
- The requirement **to consider instruments accounted for at fair value separately** (whether reflected through the profit and loss account or directly in equity) **for defining risk appetite statement** and to define limits.

4 KEY AREAS OF FOCUS

Our analysis of the consultation paper focuses on four key topics:

- IRRBB governance framework;
- Capital identification, calculation and allocation;
- Measurement of IRRBB; and
- Supervisory Outlier Tests.

IRRBB GOVERNANCE FRAMEWORK

The governance of IRRBB is described through three complementary perspectives, described below:

i. Risk management framework and responsibilities

The management body is clearly identified as the ultimate owner of the IRRBB management framework, the risk appetite framework and capital allocation for IRRBB coverage.

ii. Risk appetite and policy limits

The risk appetite framework and specific limits for IRRBB are incorporated as follows:

- The institution's risk appetite for IRRBB should be expressed in terms of the maximum acceptable **short-term and long-term** impact of fluctuating interest rates on **both earnings and economic value** and should be reflected in limits.
- **Instruments accounted for at fair value**, whether reflected through the profit and loss account or directly in equity (via other comprehensive income), **should be taken into account separately**.
- Limits should be aggregated at consolidated level and sub-limits may be applied for individual business units, portfolios and instruments. The hedging strategies using derivative instruments are specified and institutions should have a dedicated set of limits to monitor the evolution of the hedging strategy.
- Any breach of limits should receive prompt management attention and escalated without delay.

iii. Risk policies, processes and controls

The core elements of a complete and effective IRRBB governance framework includes a **dedicated IRRBB policy**, which is reviewed at least annually, ensures the lines of

authority and responsibilities for managing IRRBB exposures, the proper process of scenario, assumptions and measurement review, and its soundness and coherence in light of the outcomes of regular reports.

Other minimum requirements for IRRBB governance are specified as follows:

- Regular review by internal control and independent auditing function;
- **IRRBB models must be subject to independent validation**; and
- Appropriate IT system and data quality should be in place to guarantee the quality and the accuracy of the IRRBB exposure measurement.

CAPITAL IDENTIFICATION, CALCULATION AND ALLOCATION

The EBA consultation paper points out that institutions should not rely exclusively on supervisory assessments of capital adequacy in respect to IRRBB (notably the variation of the economic value of equity ('EVE')), but they should **also develop internal methodologies commensurate with the institution's risk appetite and management framework**.

More precisely, the EBA has prescribed more specifically the **factors to be taken into account in the capital adequacy assessment** for IRRBB, and the criteria to be used when considering allocation of capital.

For the capital adequacy assessment, apart from the size and tenor of internal limits on IRRBB, the effectiveness of hedging strategies, and the robustness of the modelling assumptions and the design of the stress scenarios, **factors such as the following** should also be taken into account, which requires a more comprehensive evaluation of the risk profile of the institution:

- The drivers of the underlying risk and the circumstances under which the risk may materialise;
- The impact of embedded loss;
- Capital adequacy, taking into account the capital distribution ability across legal entities in the prudential perimeter, instead of focusing on the overall capital adequacy at consolidated level; and
- The impact on EV and earnings of mismatch positions in different currencies.

Moreover, **in terms of capital allocation**, the institution should base their capital requirement **not only on the potential or actual loss, but also consider if the fluctuation of net interest income would affect the normal business operations and the dividend distribution**.

When there is a high risk of interest earnings being materially reduced, the institution should consider capital buffer adjustments.

MEASUREMENT OF IRRBB

IRRBB should be measured and monitored through two complementary approaches: on going management and annual stress tests. The measurement methodologies are different from each other as they serve different purposes.

Potential changes to both the economic value (EV) and earnings should be measured.

Ongoing management of IRRBB

For the purpose of ongoing management of IRRBB, **at least quarterly reviews of IRRBB exposures is necessary, with the main considerations being:**

- The application of a conditional or unconditional cash flow modelling approach according to the institution's activities and the complexity of its business model;
- The use of appropriate assumptions across different currencies;
- The design of appropriate shock scenarios capturing the institution's risk profile, complexity and key markets, include but not limited to the scenarios prescribed by the regulators; and
- The inclusion of negative interest rate scenarios.

The results of the shock scenarios should be embedded into decision-making at appropriate management levels and be used to establish and review the policies and limits for IRRBB.

Interest rate stress tests

Interest rate stress tests are typically **incorporated into the ICAAP process** and conducted at least annually. This process is integrated into the institution's overall stress testing framework. The stress scenarios should be **more extreme than those used in the on-going management process** to test the vulnerability of the institution. The result should be used in strategic decision-making including internal capital allocation.

Measurement assumptions

When measuring IRRBB, institutions **should fully understand and document key behavioural and modelling assumptions**. These assumptions should be aligned with business strategies and regularly challenged.

Institutions should take into account the following assumptions for both economic value and earnings-based measures of IRRBB:

- **The exercise of interest rate options** (automatic or behavioural) by both the institution and its customers under specific interest shock and stress scenarios;
- The treatment of balances and interest flows arising from **non-maturity deposits ('NMDs')**;
- The treatment of fixed term deposits (**with risk of early redemption**) and of fixed rate loans and fixed rate loan commitments;
- The treatment of own equity in internal economic value measures; and
- The implications of accounting practices for the measurement of IRRBB; in particular hedge accounting effectiveness.

In terms of measurement assumptions, **three elements are highlighted** and are describe below:

i. Behavioural assumptions for customer accounts with embedded customer optionality

Institutions should assess the following elements:

- The potential impact on current and future loan prepayment speeds arising from the interest rate scenario, underlying economic environment, contractual features and competitors' activities;
- The elasticity of adjustment of product rates to changes in market interest rates; and
- The migration of balances between product types as a result of changes in their features, terms and conditions.

Institutions should have policies in place governing the setting and regular assessment of the key assumptions for the treatment of on and off-balance-sheet items that have embedded options in their interest rate risk framework.

ii. Behavioural assumptions for customer accounts without specific re-pricing dates

Institutions should notably assess the following elements:

- Be able to identify 'core' (as opposed to 'transient') balances on transaction accounts;
- Assess the potential migration between deposits without specific re-pricing dates and other deposits;
- Consider potential constraints on the re-pricing of retail deposits in low or negative interest rate environments;

- Ensure that assumptions about the decay of low cost balances are prudent and appropriate;
- Not exclusively rely on statistical or quantitative methods;
- Have appropriate documentation of these assumptions in their policies and procedures, and a process for keeping them under review;
- Understand the impact of the assumptions on the institution's own chosen risk measurement outputs and internal capital allocation decisions; and
- Undertake stress testing to understand the sensitivity of the chosen risk measures to changes in key assumptions.

iii. Corporate planning assumptions for own equity capital

The BCBS IRRBB standard of April 2016 has specified two possible approaches for **treating institutions' own equity capital**:

- The EVE measure with no application of rate or term on the equity; and
- The 'earning-adjusted EV' where assumptions about the investment term of equity and its interest rate sensitivity is taken into account.

The EBA consultation paper **outlines some guidance if the institution decides to adopt a policy to stabilise earnings arising from their own equity**. Apart from defining and understanding a chosen investment maturity profile, institutions are advised to avoid taking income stabilisation positions that significantly reduce their capability to adjust to significant changes in the underlying economic and business environment, and to include the investment term assumptions in the corporate planning cycle.

SUPERVISORY OUTLIER TEST

In line with BCBS IRRBB standard of April 2016, the SOT is strengthened under the EBA proposals.

Institutions should assess the sensitivity of their EVE at least quarterly through:

- The application of **parallel shocks of +/- 200 bps shift of yield curve, with the threshold of 20% of EVE decline in comparison to the institution's own funds (Tier 1+Tier 2); and**
- The application of **six interest rate shock scenarios by currency (shock sizes differing between currencies), with the threshold of 15% EVE decline in comparison to the Tier 1 capital** of the institution under any of the six scenarios.

In particular, institutions should report annually, **through the ICAAP report**, to the competent authority the change in EVE that results **from the latest calculation**.

In order to maintain comparability between institutions the EBA clearly defined the **principles and the treatment of certain balance sheet positions for the SOT exercise**. A number of new requirements are introduced to enhance the accuracy and the comprehensiveness of the exercise:

- The inclusion of pension obligations and pension plan assets unless they are captured elsewhere;
- Inclusion of **interest rate cash flows** (repayment, repricing and interest payments);
- Introduction of post-shock interest rate floor;
- Introduction of a **five year cap for retail and non-financial whole sale deposits** without specific repricing maturities by currency; and
- Independent treatments of interest rate shocks by currency.

5 NEXT STEPS: WHAT ARE THE KEY CHALLENGES?

The different elements summarised above provide an understanding of the EBA's supervisory approach and expectations in respect of IRRBB. Several points emphasized in their consultation paper present challenges for institutions; notably:

- The IRRBB governance framework, assumptions and stress scenario design, and capital allocation and risk appetite limits should be coherent with their business model, strategies and the business environment in which they operate.
- All interest rate sensitive elements should be included in the IRRBB management framework and resultant calculations. For earnings, institutions should not only consider interest income and expenses. Interest rate derivatives, off balance sheet commitments, and market value changes of instruments impacting the P&L or directly in equity via fair value of the OCI should all be appropriately included with defensible assumptions.
- Both an earnings perspective and economic value perspective are required to be considered. In particular, for the limits in IRRBB risk appetite, both long term and short terms limits for earnings and economic values are prescribed.

- More stringent requirements for the accuracy and comprehensiveness of the measurement of IRRBB and the Supervisory Outlier Test ('SOT') (in particular, there is an increased level of sophistication in the shock scenario designs, interest cash flows modelling and customer behaviour assumptions).

6 ABOUT AVANTAGE REPLY

Avantage Reply (a member of the Reply Group) is a pan-European specialised management consultancy delivering change initiatives in Risk, Compliance, Finance (Capital Management and Regulatory Reporting), Treasury and Operations within the Financial Services industry.

Within our core competencies, we have extensive experience in implementing changes driven by:

- Industry-wide legislative and regulatory initiatives (e.g. CRD, BRRD);
- Mergers, Acquisitions & Divestments (e.g. business combination, separation and flotation); and
- Business improvement and optimisation agendas (e.g. risk appetite and capital allocation).

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