Interest rate risk in the non-trading book: approaching the target regulatory framework

Banks’ readiness for main regulatory news

**Introduction**

The review of the Pillar 2 Framework under Basel IV has progressively emphasized the importance of the IRRBB management for European credit institutions. Accordingly, the CRD 5 and CRR 2 published on June 2019 complete the process of transposition of the BCBS international standards providing details on the management of interest rate risk arising from non-trading activities.

In that framework, the CRD 5 mandates to the EBA to develop Regulatory Technical Standards and revised Guidelines on IRRBB which, originally expected to be released and adopted within June 2021, have been now postponed to March 2022 due to the current pandemic emergency and the huge workload the EBA is facing.

Nevertheless, in order to be prepared for facing the current uncertainty with a reactive and sound framework while also ensuring a prompt adoption of the forthcoming regulatory prescriptions, Banks should exploit this time to verify the proper and full application of the current regulatory framework (i.e. 2018 EBA GLs on IRRBB) also assessing the coherence and the integration of the IRRBB framework with other risks (e.g. PD models and Funding strategies). Moreover, in light of impacts of Covid-19 over customers’ behavior, the monitoring of deposit flows should be reinforced for quickly assess any needs of recalibrating current behavioral models and for ensuring the reliability of IRRBB metrics and outstanding hedging strategies.
EBA: “Institutions should treat IRRBB as an important risk and always assess it explicitly and comprehensively in their risk management processes and internal capital assessment processes.”

Regulatory updates

Interest Rate Risk in the Banking Book (IRRBB), intended as the risk to both earnings and economic value (and in turn to capital) of an institution arising from impacts of adverse movements in interest rates on sensitive positions on banking book, is nowadays receiving increasing attention from the market players mainly due to:

- The outbreak of the pandemic emergency which affected retail and wholesale customer behaviour and, in turn, stressed deposits flows potentially invalidating behavioural model outcomes.
- Responses to rate changes from the current low or negative levels which could diverge in terms of both monetary policies and customer behaviour thus creating uncertainty for the banking sector.
- The international regulatory framework since has been enriched with Standards for IRRBB issued by the Basel Committee on Banking Supervision (BCBS) in 2016 and which adoption is still in progress.

In light of the above, the management of IRRBB has acquired relevance within financial risks for European credit institutions guided by the regulatory evolution, which has passed in Europe through a multi-phased approach in converging toward IRRBB Standards defined by BCBS for the review of the Pillar 2 Framework under Basel IV.

The first step towards the implementation of IRRBB Standards1, aimed to bridge the gap before the issuance of the revised Risk Reduction Package, is represented by the “EBA Guidelines on the management of interest rate risk in the non-trading book”2, implemented from July 2019 and amending those issued in 20153. The guidelines introduce an approach for identifying, measuring, monitoring and controlling the IRRBB as well as giving guidance for the conduction of the Supervisory Outlier Test as a supervisory tool for monitoring and comparing banks’ exposures on IRRBB.

The second step is represented by the entry into force of the revised Regulatory Risk Package CRD 5 and CRR 2 that will complete the process of transposition of the legislation, in accordance with the BCBS international standards, and provide a revised IRRBB Framework.

Accordingly, in line with the CRD4 and as reported within the “EBA Risk Reduction Package Roadmaps”5, the EBA is mandated to develop regulatory technical standards (RTS) and to update the EBA Guidelines that will provide institutions with details about new regulatory requirements. Nevertheless, the original deadline of June 2021 is postponed6 to March 2022 mostly due to the workload the EBA is facing in addressing both mandates from the Risk Reduction Package as well as the pandemic emergency.

The amendments include the introduction of a common standardised approach, the requirement to monitor and assess CSRBB and the addition of the NII perspective to complement the EVE for the interest rate risk management and the supervisory outlier test.

More in detail, main regulatory news are:

- The introduction of a common standardised approach and a simplified standardised methodology (for small and non-complex institutions) that institutions may use for the IRRBB management as well as the related conditions of applicability.
- The definition of criteria for determining whether or not the implemented internal systems are satisfied.

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1 BCBS, Standards Interest rate risk in the banking book, April 2016.
6 Article 98(3a), Article 84(5), Article 84(6)
8 EBA, correspondence related to “technical standards for the risk reduction measures package” June 2020.
• The monitoring and assessment of credit spread risk from non-trading book activities (CSRBB).
• The performance of the supervisory outlier test (SOT) on IRRBB under both the NII and EVE perspectives (currently applicable only on EVE) and the definition of what constitutes a large decline under NII (namely, in terms of thresholds definition).

Main Actions

In this context, it is fundamental for institutions to take advantage of this period before the issuance of the new regulatory framework to verify their compliance with the EBA Guidelines on IRRBB through a self-assessment analysis as a preliminary step toward the adoption of the revised IRRBB regulatory framework in line with the proportionality principle.

In particular, institutions should take into account the implementation of the following pillars:

Governance

A sound and integrated Governance for the IRRBB would ensure the management of the risk coherently with the overall banking strategy and in accordance with the risk target and risk appetite. Accordingly, the IRRBB Policy shall define roles and responsibilities in compliance with regulatory prescription while ensuring the:
• Integration of the IRRBB measures in the definition of the overall strategy.
• Definition of the Risk Appetite Framework for IRRBB in terms of triggers and limits for both EVE, NII and, if material, also for each sub-type of risk (i.e. Gap Risk, Basis Risk and Option Risk).
• Definition of criteria for the internal assessment of the adequacy of the IRRBB Framework.
• Proper development and validation of the IRRBB measurement including behavioural models, the treatment of the related model risk, the CSRBB and the Stress Test analysis.
• Coherence of methods and methodologies for the IRRBB management and the calculation of the economic capital for ICAAP purposes.
• Integration and coherence of IRRBB models and methodologies with other risks (e.g. Liquidity, Credit risks).
• Adequacy standards for the IT and Data Quality systems.

Update of behavioural models framework

In line with the EBA Guidelines and in order to address the Covid-19 impacts (refer to Focus on Covid-19), institutions should update their behavioural models’ framework in order to improve their predictability as well as granting the monitoring of the performance via backtesting exercises, the quantification of the model risk for ICAAP purposes and the periodic analysis of materiality of balance sheet items relevant for modelling (e.g. sight items). Moreover, in line with the market best practice and in order to obtain more reactive computations supporting the managerial decisional process during the pandemic emergency, the Bank should evolve the underlying methodology introducing new estimation techniques (e.g. machine learning) also in order to exploit the modelling outcomes for fostering the integration among various risks, such as:
• Adopting the ALM sight deposit models’ outcomes within the Credit Risk Probability of Default and scoring models. This would allow integrating the credit models with a forward-looking module on cash accounts evolution for micro-cluster of clients (e.g. via Machine Learning clustering techniques on ALM models outcomes). In turn, such approach would increase the predictability power of the Credit Risk models considering the relevance of realized and expected customers’ cash accounts information for estimating PDs.
• Exploiting the modelling of sight items for identifying stable sources of funding for liquidity risk purposes as well as for defining and refining hedging strategies and related replicating portfolios.

Implementation of IRRBB scenario analysis and stress testing

The estimation of the IRRBB exposure should follow a “scenario” approach, namely estimating the sensitivity of risk exposure with respect to macro-financial assumptions. However, this would not limit the scope of the analysis to the current and upcoming regulatory exercises but shall be extended to managerial purposes, reinforcing the bank profitability through specific balance sheet government processes and strategic planning. Therefore, impacts on economic value and earnings have to be calculated also under additional managerial scenarios tailored to the bank’s peculiarities and defined taking into account:
• Different underlying assumptions in terms of stress/shift on the balance sheet (e.g. run-off, constant, dynamic assumptions), the yield curve (e.g. parallel, non-parallel),

Focus on impacts of Covid-19 emergency to customers’ behavior

The pandemic emergency has hugely affected the macro-economic outlook and, in turn, influenced retail and wholesale customers since have shifted toward a more prudent behavior to face the period of uncertainty. The generated inflows attenuated net outflows driven by an increase in drawings of credit lines and market tensions. Overall Banks’ liquidity positions did not show any deterioration in Q1 2020 (namely, LCR remained roughly stable) according to the EBA Risk Dashboard (published as of 30th of July 2020). Nevertheless, during following months (when most government supports will conclude) banks may experience increasing level of distressed customers and, consequently, higher exposure towards interest rate risks on deposits.

In light of the above, banks are planning specific actions such as revisiting behavioral models on sight items, reassessing current underlying assumptions, rebalancing replicating portfolios and refining stress scenarios in order to mitigate arising risks among which inaccurate hedges or misleading of IRRBB metrics. Moreover, a strict monitoring of deposit flows and the related deviations of observations respect to predictions is required for promptly evaluating any needs of model recalibration.
behavioural models and commercial margins.

- The opinions of experts from involved functions ensuring consistency with business strategy.
- The macroeconomic environment (e.g. the current economic conditions driven by the pandemic emergency shall be reflected in defining an ad-hoc scenario).
- The interaction with other related risk categories, such as credit risk and liquidity risk.

The shock sizes and scenarios should be reviewed and recalibrated periodically.

**Development of IRRBB hedging strategies**

With reference to IRRBB hedging strategies, it is particularly relevant for Banks understating benefits deriving from their definition and implementation.

Consequently, due to the complexity in the implementation of an adequate natural hedging framework, institutions should adopt tailored hedging strategies in order to reduce the effects of changes in interest and income statements. Besides, the current low costs associated with hedging strategies are definitively representing a unique chance to grasp. On the other hand, the drastic reduction of earnings volatility ensured by carrying out a thorough hedge accounting framework would be beneficial for several reasons, such as:

- A reduction of the internal capital allocated to hedge against market fluctuations.
- The improvement of short and long-term liquidity profile thanks to constant cash flow.
- A lower level of idiosyncratic risk financial institutions may face, with benefit in terms of equity risk premium.

The arrangement of accurate hedging strategies and their translation in a suitable accounting framework would, therefore, grant steady annual results and ensure a better investor’s perspective of institutions’ financial soundness.

**How can Deloitte help?**

Deloitte’s risk management team leverages on market intelligence and industry expertise when assisting you in implementing a sound Risk Framework. This would be crucial for facing the management of the IRRBB during the current challenging environment while reducing the normative gap against the upcoming regulatory reform. Accordingly, in line with the current and upcoming regulatory prescriptions, Deloitte relies hands on experience in supporting you to:

- Perform a gap analysis of the whole IRRBB framework to promptly ensure full compliance toward current regulation in order to foster the bank in adopting the imminent extended regulatory framework.
- Supporting the identification and resolution of any deficiency which may impede a sound and a reactive management of the risk during the Covid-19 emergency.
- Define and implement an integrated IRRBB Governance covering all crucial aspects emphasized by regulators.
- Define, develop and implement a methodology for the measurement of IRRBB.
- Design IRRBB scenario analysis and stress tests methodologies in line with regulatory and market best practices also with the aim of supporting managerial actions.
- Review and validate behavioural models’ framework through the use of new estimation techniques able to exploit the modelling outcomes for fostering the integration among various risks (e.g. Credit and Liquidity Risk).
- Development of IRRBB hedging strategies in order to grant steady annual results and ensure a better investor’s perspective of the institution’s soundness.
- Define and implement reporting and monitoring processes.

**EBA:** “Institutions should identify their existing and prospective exposure to IRRBB in a proportionate manner, depending on the level, complexity and riskiness of the non-trading book positions they face, or an increasing risk profile taking into account their business model, their strategies and the business environment they operate in or intend to operate in.”