IRBA for Everyone: Unlocking Big Opportunities for Small Banks under CRR III

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Content

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01. Greater Flexibility Thanks to CRR III

With the finalised Capital Requirements Regulation that came into force on 1st January 2025 (CRR III), banks can implement a tailored partial use of the Internal Ratings-Based Approach (IRBA) and thus achieve a more efficient use of capital in conjunction with improved risk and capital management. d-fine has been an experienced partner for banks in the IRBA transformation for over 20 years with more than 100 IRBA projects completed successfully and offers full support in this area.

While exceptions to the application of the IRBA on the entire portfolio previously had to be justified, CRR III now offers extensive options for the choice of the rating approach for individual exposure classes. This allows banks to adopt a selective approach focusing on exposure classes that are particularly suited for the development of internal rating models and offers substantial RWA (risk-weighted assets) reductions. Typically, these are primarily the risk exposures from the retail business. With a corresponding Permanent Partial Use (PPU) strategy[1], the implementation of the IRBA also offers attractive advantages for smaller financial institutions.

In the German banking market in particular, some institutions have recognized this opportunity and are preparing to switch to internal models. This is also motivated by the backdrop of a possible low-interest rate environment, in which efficient capital utilization will become essential. Importantly, introducing the IRBA also leads to significantly improved process and data quality – an advantage that extends far beyond risk management and often opens up new opportunities on the market.

02. Case Studies

The following case studies illustrate the potential with regards to the CET1 ratio (Common Equity Tier 1 capital ratio) by transferring individual or several exposure classes to the IRBA. A regulatory condition for the use of the IRBA is that individual exposure classes are to be transferred to the IRBA together with all positions they contain. In addition to exposures from private individuals, the retail exposure class also includes exposures of less than € 1 million from small and medium-sized enterprises (SMEs).

Case Study: German 'Bausparkasse' (Building Society)

Building societies refinance themselves through building society deposits, which often results in a liability surplus in a low-interest rate environment. In the past, this surplus was mainly invested in safe securities from financial institutions.

The portfolio of a building society mainly comprises building society loans (retail exposures) and various financial investments. While retail business is a homogeneous block of mortgage loans, financial investments are typically very heterogeneous. Efficient use of internal models (rating procedures for estimating PD and LGD) is therefore usually only possible in retail business.

1 The PPU strategy can also be optimized in relation to the 'output floor' newly introduced in the CRR III at 72.5% of the total RWA with regards to the credit risk standardized approach and evaluated at overall bank level.

The following example illustrates the potential: In the Credit Risk Standardized Approach (CRSA), the average risk weight for retail business is 46%, whereas under the IRBA, it is only 24%. This reduction results from the direct consideration of creditworthiness (average PD of 1%) and the high collateralization of mortgage loans (average LGD of 30%), which lowers the RWA in retail business by approximately 50%. By transferring just one risk exposure class to the IRBA, a significant reduction in Risk-Weighted Assets (RWA) of approximately € 1.5 billion can already be achieved.

€m	CSRA	IRBA
RWA Credit Risk	7,120	5,650
Thereof Retail Exposures	3,060	1,590
Other Exposure Classes	4,060	4,060
RWA Other Risk Types	560	560
Total	**7,680**	**6,210**
CET1 Ratio	**15.4%**	**19.1%**

Table 2: Case Study: Building Society

Case Study: Cooperative Bank / Public Savings Bank

Cooperative banks – similar to savings banks – pursue a community-oriented approach that is focused on the regional economy and citizens. The protection of members' interests requires stable, low-risk investment strategies, which are reflected in a predominantly secured business model.

Comprehensive collateral coverage is a key part of their risk management. This results in a homogeneous credit portfolio with a high degree of collateralization, which – similar to building societies – offers significant potential for reducing RWAs and strengthening the CET1 ratio when transferred to the IRBA.

In our example calculation for retail exposures, around 50% are secured by mortgages (average LGD for all receivables: 40%). While the average risk weight under the CRSA is 65%, it is approximately 33% under the IRBA. Consequently, RWAs in the retail exposure class decrease by nearly 50% when IRBA is applied. Even in the case of a portfolio where a notable portion of exposures is not transferred to the IRBA, transferring retail exposures can still result in a significant increase in the CET1 ratio.

The capital savings achieved through the IRBA are offset by increased ongoing costs for maintenance and further development of internal models, as well as one-off expenses for the IRBA transition, compared to the CRSA. As a reference point, smaller and medium-sized banks can expect recurring costs equivalent to approximately 5–10 additional FTEs. The implementation costs depend on the complexity of the business, the IT landscape, and other factors, and typically range between approximately € 2–10 million. However, these costs are usually amortized within less than two years due to the capital savings achieved, even for institutions with a balance sheet total of less than € 10 billion.

€m	CSRA	IRBA
RWA Credit Risk	3,300	2,670
Thereof Retail Exposures	1,300	670
Other Exposure Classes	2,000	2,000
RWA Other Risk Types	290	290
Total	**3,590**	**2,960**
CET1 Ratio	**14.9%**	**18.1%**

Table 2: Case study: Cooperative Bank / Savings Bank

03. Typical IRBA Challenges

The transition to the IRBA requires careful planning and implementation to meet regulatory requirements while simultaneously achieving operational efficiency. The key challenges include:

- Data and IT Systems:

High data quality is essential for developing internal models. Banks must ensure that historical and current data on probability of default (PD), loss given default (LGD), and other relevant risk parameters are available sufficiently detailed and complete. Complicating matters, so-called 'technical debt' is often present in the relevant IT systems, arising from migrations or other architectural projects. This frequently increases the effort required for data preparation and for aligning credit processes with regulatory compliance. However, with the growing regulatory focus on implementing data governance requirements (BCBS 239 / RDARR[2]), a structural improvement in data quality and systems will also become essential for Less Significant Institutions (LSIs) in the foreseeable future. This creates additional synergies with the introduction of the IRBA.

2 We describe the supervisory expectations and principles of seamless integration of risk reporting standards in credit institutions in our White Paper; see https://www.d-fine.com/en/news/bcbs-239-rdarr/.

- Risk Models:

Internal models are at the heart of any IRBA implementation. These must comply with regulatory requirements and enable reliable risk differentiation. Based on over 20 years of project experience and corresponding tools, d-fine can efficiently support model development. Members of banking associations often have an advantage in this regard, as they can frequently access pre-validated or even approved models from central service providers, which can significantly reduce the costs of implementing the IRBA.

- Structural and Procedural Organisation:

IRBA banks are subject to more stringent requirements in terms of lending and risk management processes. A thorough analysis often reveals the need to adjust processes, systems, and even the organizational structure within risk management. Regarding the organizational structure, aspects such as adequate staffing or the outsourcing of certain functions must also be discussed and evaluated.

Ideally, these tasks are supported by employees who have already gained experience at IRBA institutions and are familiar with the potential pitfalls in the detailed design. Experienced and specialized partners, such as d-fine, can further help minimize implementation and audit risks.

04. Becoming an IRBA Bank with d-fine

d-fine is an experienced implementation partner in credit risk modeling and has successfully completed over 100 IRBA projects in European banks. Thanks to this extensive experience, d fine supports banks comprehensively in their transformation towards an optimized target operating model. We guide you through the IRBA transition in three key phases:

Preliminary Study

Before sub-portfolios are transferred to the IRBA, it is essential to make a reliable assessment of the economic advantages and the expected one-off and ongoing costs. d-fine supports this process through, among other things, a gap analysis of processes and data, portfolio evaluation, and the preparation of a well-founded decision-making document.

IRBA Transformation

Based on the preliminary study results, d-fine can either provide targeted support in specific areas – such as model development – or take the lead in managing the entire transformation process (‘turnkey’ IRBA transformation). This involves the use of modern tools such as our d-fine’s CreditRiskSuite, combined with highly qualified consultants who bring extensive expertise in regulatory requirements, industry standards, and best practices.

Audit Preparation and Support

The IRBA transition concludes with the regulatory review and approval of the models. d-fine leverages its experience from more than 50 supported audits and ensures professional coordination with the regulatory authorities.

Our team would be pleased to discuss how your institution can benefit from an IRBA transition.

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