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To be or not to be IRB

– Which capital approach to take is the question?

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Executive summary

When adapting to the Basel 3.1 reform, it is time for Nordic banks to critically evaluate the benefits of being (or becoming) an Internal Rating-Based (IRB) approved bank. Risk and finance management teams need to reconsider if they are applying the right approaches to their portfolios. Following an IRB approach might no longer be the optimal choice, even for advanced banks.

Before management teams make long-term strategic decisions about how much money to invest in Advanced IRB modelling and credit risk mitigation techniques, they need a crystal-clear view of three things: (1) the current and future banking book credit portfolio mix; (2) the credit approval process; and (3) the drivers of capital requirements. Management teams who do not fully understand these components and how they interact might face regulatory restrictions, reputational risks, increased operational costs and challenges to long term capital management.

The aim of this paper is to support and guide Nordic bank management teams in their considerations regarding whether the current IRB or Standardised (ST) approach remains suitable for them, given the Basel 3.1 reform. This paper discusses the main differences between the Internal Rating-Based (A-IRB and F-IRB) approaches and the ST approaches, exploring key reflections management teams should consider to assess the relative benefits of the two approaches. This assessment should inform strategic decision-makers on whether a bank should transition between the ST and the internal rating-based (A-IRB and -IRB) approaches for one or more portfolios — or vice versa. Transitioning from one approach to another is a significant decision and will impact the full end-to-end credit risk process. We detail the key inputs to decision-making and crucial issues to consider from a modelling perspective, elaborating on the possible benefits and challenges of transitioning in either direction.

Key takeaways

- Basel 3.1 changes how banks calculate capital requirements. Therefore, management teams should revisit their strategic choice regarding the selection of an IRB or ST approach, as a transition of approach for some portfolios could mitigate potential increases in capital requirements plus development and maintenance costs.
- The expected implementation deadline for Basel 3.1 in the EU is 1 January 2025. Nordic prudential regulators are anticipated to align with this deadline.
- The business case for portfolios currently on the A-IRB approach is decreasing due to higher the cost and effort required. This might incentivise a transition to an F-IRB or ST approach.
- Management teams need to identify the portfolios where it makes sense to transition to (or from) the modelling IRB approach, considering the financial impact of the proposed changes as part of a comprehensive business case which supports, and reinforces, the rationale for the selected approach.
- There is an increasing trend for banks moving portfolios (or entirely) from IRB to ST, but this requires significant effort to deliver. Mapping the implications for credit risk modelling and making development choices to optimise strategic business benefits within new regulatory constraints is not trivial in practice, as the full end-to-end credit process needs to be considered.
- The end-to-end credit process analysis is challenging but extremely important for management decisionmaking, as the consequences of inadequate analysis can lead to increased costs and greater regulatory scrutiny on related topics, if the perception is that risk management is not adequate.

Where management teams have decided to transition from the current approach, it is essential to engage with regulators and investors effectively to ensure a successful application and prepare senior stakeholders for the expected changes. Regulatory affairs teams need to proactively manage the relationship with regulators, with strong and consistent communication management before and during the application period. Applications to move to IRB or revert to an ST approach need to be actively managed, across application drafting, quality assurance and governance processes, involving stakeholders and collating supporting documents on a structured and timely basis.

Basel 3.1 change drivers for transition

The new Basel 3.1 framework changes how banks calculate their capital requirements across risk types. The amendments to capital requirement calculations are expected to affect Nordic IRB banks more, on average, than their European peers due to the impact of output floors on low-risk mortgage portfolios in the Nordics. Our blog summarises the key changes introduced under Basel 3.1.

The Basel 3.1 changes were outlined in our previous white paper <u>Basel 3 reforms – The impact on Nordic banks</u>. Previous Basel accords gave banks significant freedom to calculate Risk Weighted Assets (RWA), under the IRB approaches. This has led to a high variability in capital requirements calculated by banks, which raised concerns with regulators and market participants about the risk of under-capitalisation of banks. Basel 3.1 is designed to reduce variability in RWA calculations across different banks and jurisdictions by e.g. introducing a capital floor and more sophisticated standardised approach for RWA calculations. Impact analysis consistently shows that the capital output floor is the biggest driver behind the impact of Basel 3.1 in the Nordics. Read more about output floor implementation.

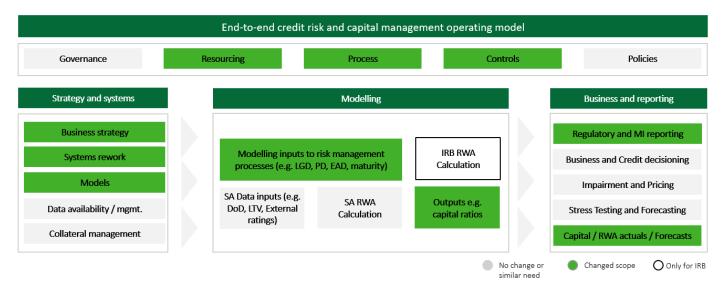
Capital/ output floor is *the* biggest driver behind the impact of Basel 3.1 in the Nordics.

Banks are in the process of adapting to the Basel 3.1 rules and for many, this has started management team discussions regarding whether the bank should continue to be IRB (or ST) or whether it would be more beneficial for some (or all) portfolios to transition to another approach. The requirements in CRR and management appetite for an application process to return to the ST approach incentivise banks to maintain existing features of the internal rating system architecture, as well as

retain and motivate talents. Any banks making the decision to move back from IRB to SA is a monumental strategy shift for credit risk management teams. However, fit-for-purpose credit risk models are still required to maintain strong risk management practices, allow for the digitalisation of credit processes, enable portfolio management, and facilitate the calculation of Expected Credit Losses (ECL) per the IFRS 9 accounting requirements. Avoiding cumbersome IRB application processes (including future model changes) can enable banks to implement models much faster, making them more relevant and motivating talents and management teams who expect a fast-time-to-market models.

Management teams need to sponsor in-depth analysis of the banking book credit portfolios and understand the drivers of capital requirements, to make long-term strategic decisions. They also need to inform about investment decisions to deliver, enhance and maintain IRB model suites and credit risk mitigation techniques, while considering end-to-end credit risk processes and the impact on cost, efficiency, risk and reputation. All of the areas in the capital operating model will be impacted by the implementation of Basel 3.1. Figure 2 below illustrates the areas of the operating model which are impacted by a move from SA to IRB (or vice versa). Impact is to be expected through strategy and systems, modelling, resourcing, processes, controls, business and reporting. This paper focuses on the impact on the credit risk models specifically.

Figure 1 Differences in scope of the IRB and ST approaches in the end-to-end process of credit risk and capital management operating model



Furthermore, IRB banks should assess scenarios to understand how the output floor could affect the allocation of capital requirements to the various components of the bank, considering different assumptions relating to the new IRB models and the application of the ST approach. Management teams will need a strong understanding of the new rules and what options (data, process, systems and model) are available to manage the impact over time.

IRB banks need to develop and maintain a deep understanding of capital requirements under the ST approach, given the new capital floor. Analysing both IRB and ST changes, plus the associated interactions throughout the bank's processes will help management understand capital requirement drivers (e.g. RWA, data quality, portfolio quality). This will be particularly relevant for banks with significant residential mortgage portfolios and externally rated corporates, where the capital benefits of being IRB are reduced, so management teams will aim to allocate capital requirements more efficiently.

Impact studies based on European IRB banks show that the Minimum Required Capital (MRC) will be higher for IRB banks because of Basel 3.1. The studies estimate that the impact on capital requirements will be between +17.5% and +18.5%. Deloitte performed a *study of the Basel 3.1 impacts* on credit risk capital requirements for Nordic banks, which found that Nordic IRB banks are likely to be more impacted by Basel 3.1 changes than their European peers. However, there are significant variations between the Nordic countries ranging from 15% in Norway to 70% in Denmark, driven by portfolio mix and country. The most material impact is affecting SME and real estate

In the Nordic countries, the most material impact is affecting SME and real estate segments.

segments. See also our blog Capital requirement calculations under Basel 3.1.

The expected implementation deadline for Basel 3.1 is 1 January 2025 in the EU, with a phase-in period until 2032. Nordic prudential regulators are anticipated to align with these dates, but implementation timelines will depend on local legislative processes, which may cause a delay of the effective date. Investors are likely to disregard the phase-in period and look at the fully implemented numbers, which they expect banks to report. The current Nordic regulatory landscape is different from the EU regulations (e.g. capital floors). However, the increased complexity of the new regulations and pressure on local regulators to ensure long-term equivalence, might incentivise local Nordic prudential regulators to follow European legislation and establish a more uniform approach with fewer, if any, local adaptations.



Main differences between credit capital approaches

European regulators are challenging banks and local National Competent Authorities (NCAs) in all European countries to take another look at the capital approach selected for credit risk.

The choice of regulatory capital approach, IRB or ST, for credit risk will vary from bank to bank. The choice may depend on the diversity of customer and products in a portfolio, how the credit risk models are used in business processes, the risk management (including automation) ambitions of the bank, the type of regulator and even the maturity of data management (from collection, to quality control to storage). It is important for the management teams in each individual bank to analyse the impact across the end-to-end credit risk life cycle and the capital management operating model (outlined in Figure 1).

It is important for each individual bank to analyse the impact on the end-to-end credit risk and capital management operating model.

For the credit risk model landscape within an IRB approach, Basel 3.1 and increased regulatory expectations result in fundamental changes being needed for internal model parameters (Loss Given Default - LGD, Probability of Default - PD, Exposure at Default - EAD and maturity). These need to reflect the credit risk management process to be fit-for-purpose. Basel 3.1 drives data change requirements for calculating key outputs (e.g. RWAs). The data inputs (e.g. Definition of Default - DoD, Loan-to-Value - LTV, external ratings) and calculation of RWA are required for both ST and IRB banks. However, for IRB banks, the output floor is a focal point for management efforts to optimise RWA, whereas the focus for ST banks is on granularity of data to maximise the benefit of ST RWA calculations.

Credit risk model landscape choices need to be consistent with a bank's overall strategy and the risk strategy. Transitioning from IRB to ST can relax the regulatory constraints regarding model development, implementation, control and use, but for the credit risk organisation, the (potential) loss of trusted quantitative measures can feel like (and result in) a monumental shift in risk management capabilities. The transition strategy requires updates in systems, capital calculation and allocation processes, risk adjusted pricing and broader model use. The effort needed should not be underestimated with complex inter-dependencies increasing the risk of delays and costs of transitioning. Analysis of the estimated time and resources, based on a current-state assessment of compliance, is essential in the early phase of a transition project. This should include plans to remediate outstanding areas of non-compliance (e.g. associated with DoD) and ensure an ongoing commitment to model use, a key cross-functional priority.

There are not considerable changes needed to data and collateral management approaches, despite the needs of the IRB and ST approaches being in many ways similar. Data collection for calculating realised LGD/EAD (current and historical data) is a major challenge to overcome before IRB compliance is possible. The information required to calculate risk drivers for internal model parameters (e.g. LGD, PD, EAD) differs by portfolio and parameter type, with the scope of systems and data sources impacting the inputs to models and outputs in the risk management processes. These drive changes in regulatory capital and management information reported relating to RWA actuals and forecasts.

Developing and retaining resources (i.e. skilled talents and technical capabilities) are key components for management teams to consider when setting out towards a target model landscape, either transitioning from SA to IRB or vice versa. Recruiting, upskilling and retaining the credit risk modelling talent pool (across all three lines of defence) are key for IRB and SA banks. Resource and capacity spikes need to be managed throughout a transition, allowing for significant regulatory liaison, model development, validation, implementation and assurance activities. Post transition, model maintenance and change management processes and controls need to be in place to ensure ongoing compliance and sufficient quality levels are retained.

Beyond the credit risk models, the business and reporting parts of the operating model (including regulatory and management reporting of capital, RWA actuals and RQA forecasts) need to be in place. The governance and policy controls, designed to ensure that the capital requirements are met, are similar. Focusing on the type of impact related to the modelling approach, Table 1 lists the main differences between IRB and ST models to consider.

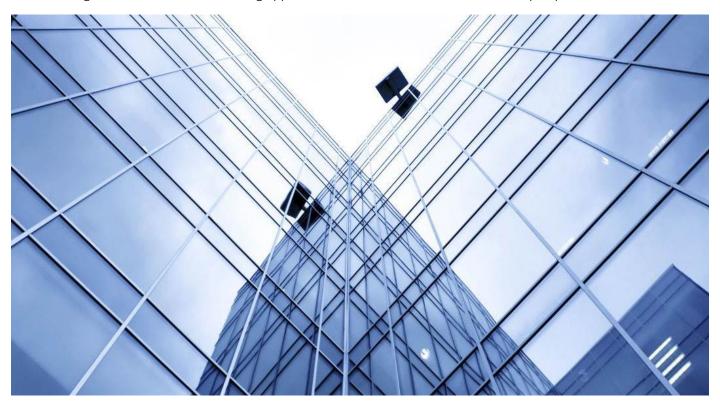
Table 1 Main differences between IRB and ST models

| Theme | IRB approach | ST approach |
|------------------------|---|--|
| Modelling framework | Modelling framework ensures compliance with regulation and helps banks make sound credit decisions, but in the IRB approach there is additional, significant constraint around operating within regulatory requirements. | Framework for models can be based on IRB regulations (as best practice) with a more restricted use (e.g. economic capital) and flexibility to move away from these standards. |
| Model design | Complex model landscape with models designed to cover all portfolios, products, countries and legal entities in IRB scope, with high standards for all IRB models, including significant requirements to justify approach and ensure replicability. | More flexibility for models to be built for most material segments only, or to varying design standards (e.g. via Minimum Viable Products for lower materiality segments). |
| PD modelling | Models needed for both new (application) and existing (behavioural) customers. Models use internal data per defined statistical requirements. | More flexibility to use expert-based models (and expert-based decisions) to a larger extent (e.g. for new customers) where data volumes are lower. |
| LGD modelling | LGD estimates require an Expected Loss Best Estimate (ELBE) and Downturn (DT) calibration, plus LGD in Default-specific features (e.g. time in default). | LGD estimate and calibration (e.g. ELBE and DT) choices driven by target model use, with focus on Point-in-Time (PiT) calibration for IRFS 9 ECL use and Long-Run-Average (LRA) calibration for risk management. |

| Theme | IRB approach | ST approach |
|-------------------------------|--|--|
| | Realised LGD is based on discounted cash flow information, using data collected from date of default to end of default (liquidation date). | Realised LGD can be a direct calculation of final loss (i.e. write-off data) with internal standards for discounted cash flow data collection and methods. |
| | Discount rate applied equals the relevant three months interbank rate plus a 5% regulatory discount rate. | Discount rate to be applied depends on what is most appropriate for model use (e.g. contract interest rate, funding costs or risk-free rate plus a risk premium). |
| EAD modelling | EAD based on CCF estimates with a Downturn (DT) calibration, and data collected per regulatory standards (including for EAD in default). | EAD based on direct CCF estimates with DT calibration requirements depending on target use (e.g. for Economic Capital). |
| Calibration approach | Minimum five years of observations to create LRA and model parameters. Local regulators in Denmark, Sweden and Norway require banks to use data from the early 90's to define a downturn (used in PD, LGD and EAD calibration). | More flexibility of period chosen and level of conservatism (mix of good and bad years). Full business cycle is recommended to calibrate fit-forpurpose models, but the weight applied to historic scenarios which are no longer as relevant can be limited more readily. |
| Model uncertainty | Margin of Conservatism (MoC) and Appropriate Adjustment (AA) to be applied on an asymmetric (I.e. prudent only) basis. | AA to be applied. Simpler assessment of MoC or model uncertainty could be included as add-on (and can be symmetrical so negative conservatism is allowed). |
| Implementation | Implementation must ensure requirements of use test are met (which cover credit risk processes, IFRS 9 ECL, RWA calculation, risk adjusted pricing Economic Capital reporting and allocation). | Implementation of models optional but to maximise return on development investment, recommended to cover credit risk processes, IFRS 9 ECL, risk-adjusted pricing, Economic Capital reporting and allocation. |
| Self-assessment | Mandatory self-assessment against relevant regulation to evidence compliance at detailed level (e.g. EBA modelling guidelines). | Optional self-assessment recommended versus CRR requirements to identify and address potential compliance gaps, to enable future transition to IRB (if required) and mitigate regulatory risks. |
| Velideries | Comprehensive IRB model validation framework designed to ensure compliance with IRB modelling requirements. Annual frequency of all IRB models regardless of | Simpler model validation framework can be applied to ensure that the models are fit for purpose for the usages. Validation frequency dependent on model tier. |
| Validation | model tier and materiality. IRB validation templates to be submitted to regulators within one month of completing validation report (if ECB-regulated). | IRB validation templates can be used to inform about less frequent regulatory interactions (e.g. as part of a SREP process). |
| Communication with regulators | Application process needed including IRB approval process. Regulators need to be informed of all model changes, and material changes need to follow pre-/post-notification process. | No application process needed relating to new models. Inform regulators about models and model changes periodically (with no pre-/post-notification process needed). |
| Team size and recruitment | Significant resources needed to build, validate and maintain compliant suite of models across the lines of defence. IRB approval can be an asset when recruiting and retaining talent. | Fewer resources needed to build and maintain models, depending on model complexity needed, driven by faster time to market and lower regulatory demands. Recruitment can be challenging if non-IRB status is perceived negatively in the talent market (with less access to the highest skilled and motivated talents). |

In addition, there are some slight differences between the capital calculation requirements issued by local regulators. In Norway, banks already have a floor of 0.2% for PD and 20% for LGD, respectively, for residential mortgages. Therefore, banks can expect a smaller effect from the new Basel 3.1 rules.

The following sections detail the modelling approaches to consider from the IRB and SA perspectives.



Reverting to the standardised approach

Nordic bank management teams should critically evaluate the benefits of targeting an IRB approval, considering the reduced scope of IRB and the output floor impact after the implementation of Basel 3.1. Reducing IRB scope requires regulatory approval (e.g. via Permanent Partial Use application) and careful consideration to ensure risk management processes continue to use internal models which are fit for purpose (e.g. decision-making, IFRS 9 ECL and pricing).

Banks moving from the IRB to the ST approach will face new challenges. As credit risk modelling teams seek to establish and implement a new model landscape, risk management functions aim to maintain and improve standards for risk control whilst business and finance functions target the optimisation of strategic business benefits with fewer regulatory requirements to consider. Due to the new regulation, the business case for running a fully IRB-compliant bank has become less attractive, especially for smaller players. Deloitte's CRR III survey responses note that portfolios where defaults are scarce and difficult to model (e.g. central governments/central banks, public-sector entities or financial institutions) are likely (or mandated by local supervisors) to transition from IRB to ST.

Given the regulatory requirements, some banks might be forced to revert to an F-IRB approach instead. But for banks wanting to balance the operational cost while still ensuring high quality in the credit risk management process and maintain lower capital requirements, the F-IRB approach for the non-retail portfolio may be preferred.

Any changes in the portfolios subject to the ST need to be agreed with local supervisors (when agreeing on the Permanent Partial Use) who will seek comfort, that banks are not "cherry-picking" and will retain strong credit risk management capabilities if they revert from the IRB approach to the ST approach (or from A-IRB to F-IRB). As stated in CRR 149, the move to less sophisticated approaches should not be proposed as a means of capital requirements reduction only. In the unlikely event of this happening, a Pillar 2 capital add-on could be used to ensure sufficient capital.

Due to new regulation, the business case for running a fully IRB-compliant bank has become less attractive, especially for smaller players.

Banks seeking to revert from the IRB approach to the ST approach have a window of opportunity to do so within the European application of Basel 3.1 in the CRR (starting from 1 January 2025 and ending on 31 December 2027) and must meet the required conditions. Banks which have existed and been authorised to treat exposure classes under the IRB approach, can request reversal to ST only once during the period, if they are deemed to not be engaging in regulatory arbitrage, and they must revert to the ST approach within at least six months of notifying the competent authority. The competent authority has three months from receipt of the application to reject the request (Article 494d).

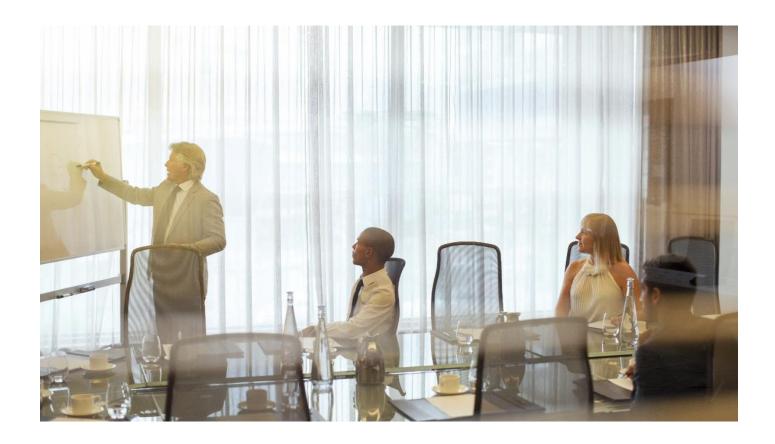
In banks already IRB approved, management teams seeking to investigate transferring portfolios to ST approach may want to consider the themes introduced in Table 2 below, and make a benefits assessment analysis. The fundamental benefit of being an IRB bank is lower capital requirements via reduced RWAs, which may be reduced (or lost) after the Basel 3.1 implementation, and hence needs to be analysed in multiple scenarios. The other key benefit of being an IRB bank is the increased quality of risk management processes and governance due to higher requirements. Model Risk Management practices are required for all banks and contribute to industry standard risk management expected by regulators. If a bank is considering to revert to an ST approach, the quality of risk management processes should be retained, with processes in some cases potentially simplified and accelerated (e.g. model implementation).

The cons of being an IRB bank are driven by operational and resourcing costs, which have increased over time, to develop, maintain and use a compliant modelling approach. From the modelling perspective, development and approval time for IRB models is longer, so IRB banks can be less responsive than ST banks. For standardised banks, there are less requirements for the quality, collection and storage of data. Higher data standards improve risk management efficiency and effectiveness, as granular data which can be trusted are prerequisite for accurate and compliant internal models. Even if the bank decides to revert to the ST approach, it still needs to ensure having an advanced data environment and granular data. Maintaining a balance between capital benefits, operating costs and risk management quality is the new target state bank management teams need to understand and target holistically, consistent with the risk strategy.

Table 2 Benefits and challenges of reverting to ST

| Theme | Benefits | Challenges |
|--------------------|---|--|
| Capital | Capital requirement could be reduced, compared to IRB, in some portfolios (e.g. real estate portfolios). Basel 3.1 standardised approach requirements ensure credit risk RWAs depend on collateralisation and can hence reduce capital needs. | Finance, treasury and business functions will have to manage higher capital requirements when using standardised risk weights for all portfolios, navigating medium- and long-term concerns regarding how competitive the bank will be. Greater volatility in capital requirements. |
| Risk management | Faster implementation of models enables risk management quantification improvements to be more agile. No limitations on use of models (or consistency of use) in terms of add-ons and floors. | Risk management teams need to establish the minimum modelling capabilities required to identify, quantify, monitor and report risks, finding the new risk management cost balance as compliance cost and focus reduce. If efficient processes are in place, they can be maintained and enhanced, giving greater flexibility. |

| Theme | Benefits | Challenges |
|-------------------------|--|---|
| Modelling | Simplified model frameworks offer more flexibility and faster implementation of new models, with model changes only needing internal approvals. Lower standards for model maintenance (incl. monitoring, calibration frequency, model tracking) reduce costs and management time. No conservatism needed in the models with "best estimate" used for decision-making (i.e. without prudent Margin of Conservatism). | Increased model risk on a known and unknown basis, with inaccurate or misleading models being used to inform management decisions, without mitigation. Over time, this can lead to credit risk management deterioration, poorer credit processes, increased non-performing exposures, increased losses and additional credit management costs. |
| Data | Fewer requirements for improving data management, particularly collection and storage standards, improve the speed of model development and deployment. | Full compliance with broader data management standards (e.g. BCBS 239) may be more challenging with the analyses and collection of extensive data still needed, but less regulatory pressure. |
| Resource needs | Reduced resources needed for building and maintaining models, and for implementing capital reporting and controls for IRB. Flexibility in the modelling framework and earlier application of models can attract talents (data scientists) seeking more flexible modelling challenges. | Recruitment might be more difficult, as more ambitious and skilled talents may seek to work in the IRB banks which are perceived to be more advanced. |
| Regulatory | Less regulatory requirements to include in Model Risk Management framework and lower scrutiny. | Required conditions to revert to the ST approach need to be met and regulatory expectations are less certain. |
| Cost | Introduction and ongoing operation of the ST approach decrease the costs. | Risk of less efficient risk management processes. |
| Validation and audit | Simplified framework and processes for validation and audit. | Risk of less effective controls framework resulting in unidentified model risk and / or slower remediation. |



Targeting the Internal Rating-Based approach

The capital requirements of the banks following the standardised approach are expected to decrease in the Nordics with the new Basel 3.1 regulation. However, targeting the IRB approach can continue to be advantageous, as the decrease of capital requirements depends on the portfolio and product mix of the bank.

Management teams and investors in growing banks using the standardised approach will want to investigate transitioning to the IRB approach. Potential reductions in capital requirements are the primary drivers behind bank management teams and shareholders considering the transition from the ST approach to the IRB approach. The new Basel 3.1 regulation and introduction of the output floor reduce these benefits and therefore could, in theory, make becoming IRB seem like a less attractive option for small and medium-sized banks, levelling the playing field between ST and IRB banks.

Capital benefits are the key drivers for transitioning from a standardised approach to an IRB approach, and with the new regulation and the introduction of the output floor, these benefits are decreasing.

Banks subject to ECB regulation will be expected to maintain a sufficient proportion of exposures (and RWAs) on the IRB approach for the bank to be considered an IRB bank, although the requirement of 85% of exposures is no longer stated. While there is no specific guidance in the Nordic regulatory landscape, the regulators do not allow "cherry-picking" and there is an expectation that a significant part of the portfolio complies with the IRB approach. In the Basel 3.1 reform, the focus will shift from coverage ratio to individual exposure classes. Deloitte's recent CRR III survey responses highlighted that the change from overall coverage ratio to individual exposure classes for A-IRB approval makes IRB more attractive for banks currently using the ST approach for credit risk.

IRB applications are a lengthy and burdensome process requiring resourcing and strong competences in multiple business functions in the bank, including modelling teams, Credit Risk Control Units, finance and regulatory affairs. The tone is expected to come from the top, with members of the Board and executive management team expected to understand how the bank is complying with IRB requirements on an end-to-end basis. Training is needed to ensure effective governance and challenge from management is a critical success factor to any application. This should start with the Board requiring a comprehensive assessment of the costs and benefits of an IRB application, considering the implications across the credit risk and capital management operating model.

There are also many requirements underpinning the successful development, implementation and use of IRB models. All new models need to go through the application process before implementation and use in Pillar 1 capital requirements (although use in Pillar 2 capital requirements can be calculated using internal models before the application is finalised). Advanced and comprehensive modelling framework is needed to deliver a compliant IRB approach supported by key standards. E.g., the methods identify, measure and monitor that the Margin of Conservatism is needed to ensure any model, process or data deficiency affecting the model estimates is mitigated on a prudent and compliance basis. Data management requirements to achieve IRB compliance also drive increased standards for data collection, version handling and storage. In the IRB approach, granular data are needed to develop and use accurate, granular and compliant models.

For management teams creating the business case for a migration from IRB to SA (or vice versa), the improvements to the risk management processes, credit risk modelling, credit risk processes and model risk management should be incorporated. The advanced models are designed to provide more accurate risk quantification, and help management to make better and timelier risk management decisions. Moving from the ST approach to the IRB approach can improve the bank's credit processes, customer selection, effective capital management, risk management tools for monitoring and aligning to the risk appetite of the financial institution. These are detailed in Table 3 below.

Resources are needed to build and maintain the internal models. Developing the existing resources or finding new resources with the relevant skills and experience can be a challenge. Banks typically seek external support during the peak periods of data collection, model development and implementation, as well as the application process. However, a decision to target an IRB approval can also attract more experienced and ambitious talents seeking a challenge, which can enable the development of stronger long-term internal risk management capabilities.

Table 3 Benefits and challenges of transitioning to IRB

| Theme | Benefits | Challenges |
|-------------------------|--|--|
| Capital benefit | Capital benefits due to lower capital requirements (in most prime risk portfolios). | Portfolios with a high concentration of real estate exposures can have lower benefits due to the more sophisticated standardised approach with credit risk RWAs varying based on collateralisation. Greater volatility in capital requirements. |
| Risk management | Enhanced risk management and overview of the model landscape through the model life cycle | Model Risk Management framework details each step in the model life cycle and outlines the governance process required to be compliant. A detailed model inventory is mandatory to track the status of all models. |
| Modelling | Higher quality and more accurate models built and validated to industry standards which are accepted as best practice. | Advanced and comprehensive model life cycle framework needed (model development, validation, implementation, and use) to ensure new models meet IRB requirements. New models and material model changes are subject to an application process before implementation. Margin of Conservatism needed to address any model, process or data deficiency, reducing the "intuitiveness" of model estimates for business users. |
| Data | Enable better data structure, data management and data quality | Requirements for data collection, version handling and storage can be costly and burdensome. |
| Resource needs | Being an IRB bank attracts ambitious and high-quality talents. | Increases resourcing needed to build and maintain the models across modelling development, validation, reporting and audit teams, increasing recruitment needs. |
| Regulatory | Increased collaboration with regulator to ensure compliance. | High regulatory focus and scrutiny from on-site visits, reviews and regular reporting. |
| Cost | Improved risk management should reduce cost of risk in the long term. | Introduction and ongoing operation of the IRB approach increases operational costs. |
| Validation and audit | Enhanced frameworks and processes will strengthen the control environment (e.g. validation and audit functions). | Detailed framework and processes for validation and audit required, with support teams in place with the skills and experience to create a collaborative, independent review and challenge culture. |



Next steps

The expected implementation deadline of Basel 3.1 is 1 January 2025 in the EU. Nordic regulators are anticipated to align with this timeline, leaving management teams limited time to critically evaluate the benefits of the IRB approach. The management teams need to analyse the drivers of capital requirements in each banking book credit portfolio to ensure that decisions on long-term investments in IRB modelling and enhancement of the credit risk mitigation techniques are made well informed.

Deloitte's recent CRR III survey revealed that the strategic adjustments to CRR III have not yet been initiated in most banks. These adjustments include activities to prepare for portfolio and RWA optimisation as well as modifications to capital allocation and/or pricing. One reason for the delay has been bank management teams waiting for the final details of the regulation, with some anticipating changes. However, given the high potential capital impacts and the time needed to inform change, it is crucial that banks start analyses and implementation as soon as possible. If banks wait too long, there will be insufficient time to understand the changes and mitigate the impacts effectively. Even for banks well-progressed with IRB modelling and credit risk mitigation data collection, the changes in the business model and the pricing of products will require a longer lead time to implement, particularly when associated with IT changes.

Management teams need an up-to-date and comprehensive impact analysis to inform about a transition between the IRB and ST approaches. The first step is to identify the portfolios where it would make sense to transition to an alternative approach, with capital impact assessments and scenario analysis for each proposed portfolio changes, established and updated periodically. The transition from the IRB approach to the ST approach is not straightforward, as we have discussed, so mapping out the implications on credit risk modelling and broader credit risk management processes is a critical early step, to ensure

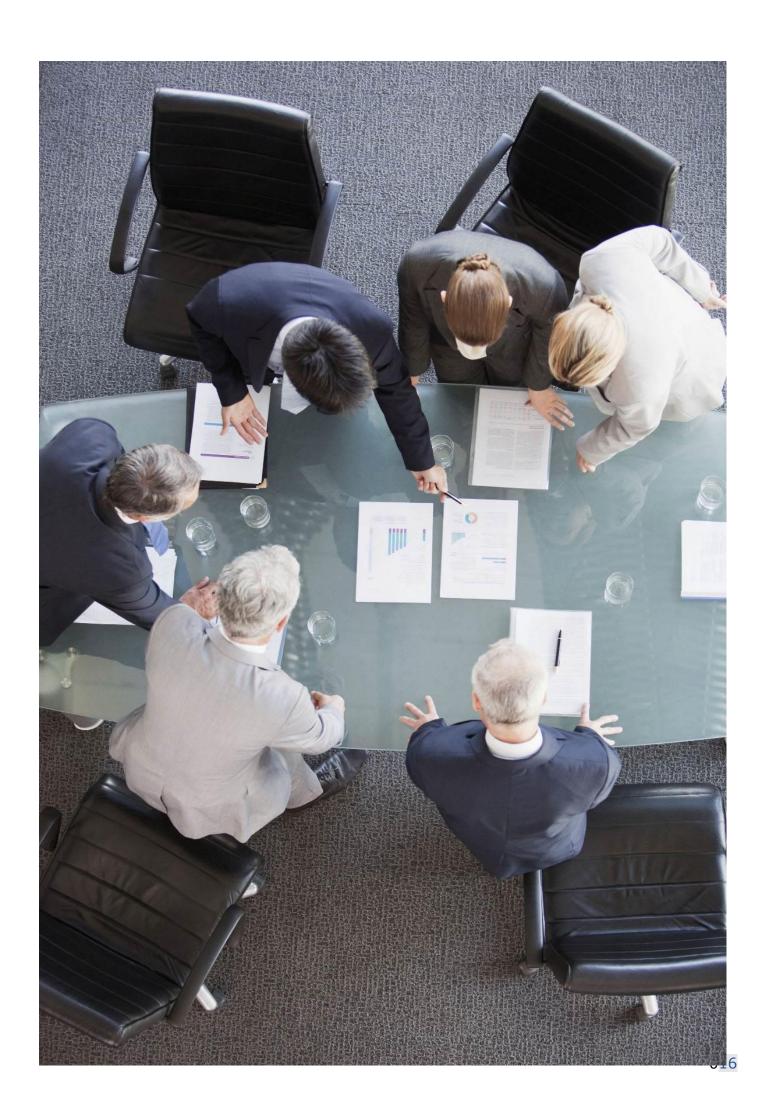
A comprehensive impact analysis is needed to support the transition between the IRB and ST approaches.

that the strategic business benefits can be achieved within the new regulatory constraints. This should include a review of the model frameworks, to ensure that they will be fit for purpose in the future state.

Whilst many banks have adopted the Agile project management methods, it is important for communication with regulators and senior stakeholders that change management teams can identify (with confidence) the timing of change for different populations (e.g. at portfolio, model and exposure class level). This requires a clear roadmap and programme structure, which is multi-year in nature and fully resourced (with contingencies in place). The roadmap should be integrated across the business, with input from all three lines of defence and key users (I.e. business and finance). We recommend management teams start with a business case to capture the rationale for the selected applications and ensure this is reviewed and updated periodically.

Regulatory applications (to IRB or reversion to the ST approach) need to be actively managed. Each application should be a standalone stream within the roadmap, including resources and activities to manage the application development, collate supporting documentation, complete a regulatory self-assessment, undertake 2LoD review and internal audit activities and manage regulatory engagement. Regulators will have requests for further information (e.g. related to implementation plans) throughout the application process which can take multiple years. Regulators will expect senior management to have a strong awareness and understanding of the changes being made and demonstrate a commitment to the regulatory expectations being fully met. Therefore, effective regulatory engagement is essential and senior management in the bank needs to be prepared (e.g. via training and mock interviews), to be able to communicate the expected changes, the status and the vision, consistently and accurately.

Management teams may find is beneficial to have access to industry benchmarks from successful applications, to better understand the areas regulators are likely to focus on during regulatory engagement. We are happy to discuss the transition of credit risk capital approaches further. Reach out to our experts to hear more.



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