Achieving Optimal IFRS 9 Compliance

Going Beyond Compliance by Optimizing Your Implementation Effort and Financial Impact

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Contents

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Executive Summary

IFRS 9 will have a substantial financial impact on banks and create implementation challenges. By taking an optimal approach to compliance, banks can balance the financial impact and the effort required and still ensure compliance. To achieve this goal, banks will need significant support from technology. In this paper, we explore the software functionality needed to support optimal IFRS 9 compliance for banks.

Across the globe, large financial institutions are working to understand the implications of the latest impairment requirements introduced by IASB[1] as part of the IFRS 9 package.[2] According to a recent Deloitte industry survey (see Figure 1), this single, forward-looking "expected loss" impairment standard will have a significant financial impact for the majority of large banks.[3]

Given that IFRS 9 requirements will be effective Jan. 1, 2018, banks are beginning to pay greater attention to this new accounting standard; as shown in Figure 1, IFRS 9 implementation budgets doubled during the last 12 months.[4] But as discussed in this paper, any steps they take toward IFRS 9 compliance should not be taken in isolation, but rather in the context of existing regulatory pressures. With Basel III, CCAR, stress testing, BCBS 239 and other requirements, banks are already exposed to high levels of regulatory scrutiny and devoting substantial attention to compliance efforts.[5]

Finally, it is expected that key jurisdictions will implement similar impairment approaches to IFRS 9, with the most relevant being the FASB's Current Expected Credit Loss project.[6]

These initiatives will combine to broaden the scope of banks that need to implement ECL-based impairment approaches.

What's Driving the IFRS 9 Accounting Standard?

During the last financial crisis, regulators identified the delayed recognition of credit losses on loans and other financial instruments as a weakness in existing accounting standards. So they introduced IFRS 9 as a forward-looking "expected loss" impairment standard that requires banks to provide more timely recognition of expected credit losses (ECL) based on future expectations – as opposed to the current "incurred loss" model.

Specifically, the new standard requires banks to account for ECL on an individual financial instrument level from the moment instruments are first recognized. They must recognize full lifetime ECL on a more timely basis. IFRS 9 effectively demands that accounting statements provide a more accurate view of a bank's financial situation by bringing the impairment methodology used within finance closer to the risk processes employed in expected loss calculations under the Basel regime.

Key implementation challenges include:
- Clarity around acceptable interpretation of the new rules;
- Internal co-ordination between finance, credit, risk, and IT functions; and
- Availability of data.

85% of banks surveyed anticipate their expected credit loss provisions to exceed those calculated under Basel rules, mostly driven by the provision of lifetime expected losses under 'stage II'

Total anticipated implementation budgets have **doubled** in the year since our previous survey.

Most global banks estimate new IFRS 9/FASB CECL rules on credit exposures will result in **loan loss provisions increasing by up to 50%** across asset classes.*

Figure 1: Deloitte survey results on bank expectations on IFRS 9. Source: Fifth Global IFRS Banking Survey: Finding your way, Deloitte, 2015.

New Requirements Bring New Challenges

Some of the more significant challenges that banks will face are highlighted below:

Financial Impacts

The majority of banks surveyed by Deloitte expect their provisions to increase by up to 50 percent as a result of IFRS 9 implementation.[7] These banks' performance indicators will experience a major hit on Jan. 1, 2018, both on the finance and risk sides. Any increases in provisions directly decrease bank key performance indicators (such as profits and balance sheet equity) and affect the bank's key risk indicators (such as capital adequacy ratios) of the Basel regime. Assessment of the KRI impact will require careful consideration of the regulations defining the role of provisions in capital adequacy ratio calculations.[8] This is not always straightforward, as both sides of the ratio's equation will be affected in different ways. Given the industry expectation that IFRS 9 provisions (ECL) will be higher than the expected loss under Basel, these rules will be crucial in determining how much of this IFRS 9 provisioning buffer can be used in Basel calculations.

As confirmed by the survey, the issues described above are likely to lead to increases in bank pricing; in the current low-rate environment, this will place additional pressure on bank operating business models.

Lastly, the business and financial impacts of IFRS 9 provisions will become more volatile over time, as the provisions will dynamically respond to relevant credit and market developments. For banks, this will represent another challenge to their forecasting processes, which are needed to assess the future development of their provisions.[9]

Broad ECL Recognition Scope

The new standard requires banks to recognize ECL at all times, for all financial instruments, and at the individual asset level.[10] It also requires banks to update the ECL amount at each reporting date to reflect changes in the credit risk of financial instruments. This significantly increases the number and frequency of impairment calculations that must be performed and the amount of information that must be collected.

New Information Requirements

IFRS 9 expands the information that a bank must consider when determining ECL. Specifically, banks have to base their ECL measurements on reasonable, timely and supportable information, including historical and forecast information. All of this information must be obtained on an individual account level and then stored, managed and reconciled with the bank's general ledger on an aggregated level.

The expected amount of IFRS 9 data – and the complexity of the calculations – will place bank systems under pressure. And according to a recent Deloitte survey, banks face a major data collection challenge: ensuring the availability and tracing of historical data needed for PD calculations and assessments of significant deterioration of credit risk.[11]

Banks will need new technology solutions capable of dealing with massive amounts of data.

Forward-Looking Calculations

Under the current regime (IAS 39), the effects of possible future credit loss events cannot be considered, even when they are expected. However, under IFRS 9, the impact of future events has to be assessed, and in a way that covers any future credit events and any relevant future macroeconomic and market developments.[12] This forward-looking requirement will further increase measurement complexity and require additional data collection and analysis.

New Credit Risk Modeling

Banks will need to develop a new set of credit risk models for IFRS 9 ECL measurement. To a certain extent, inputs from the existing Basel credit risk models could be used. However, due to the number of differences between the two frameworks, IFRS 9 ECL models will still have to be treated, reviewed and managed separately.

Furthermore, to tackle the forward-looking aspect of IFRS 9, additional models will have to be adjusted or created to cover macroeconomic parameters, prepayments, collateral value and other areas. As a result, the number of models used by banking institutions will increase significantly, which will stress existing model development, validation, and deployment processes and technology.

Considering and Assessing All the Alternative Choices

For all of the areas described, IFRS 9 creates a great deal of room for subjective interpretation and methodological choice, and each interpretation and choice can potentially have significant financial impacts on banks. In order to identify the optimal interpretations and choices, banks should assess and review all plausible approaches by running multiple simulations on relevant data sets. Due to the strong and indirect dependencies between calculations of KRIs and KPIs, banks will likely need to perform full recalculations in order to properly assess the impact of these choices.

Given these complexities, the large data volumes involved and the broad scope of IFRS 9, banks using their existing technologies will face performance challenges and processing bottlenecks when running simulations to determine optimal choices. They can avoid these bottlenecks by investing in higher-performance solutions.

Alignment With Other Bank Processes

There will be sizable overlap and dependencies between the various components of the ECL measurement process and other existing processes within banks – for example, processes related to stress testing, pricing, credit risk modeling, asset liability management and more (see Figure 2). Therefore, banks should not only facilitate proper sharing of information across these different areas, but also strive to synchronize these processes for greater efficiency and effective governance.[13]
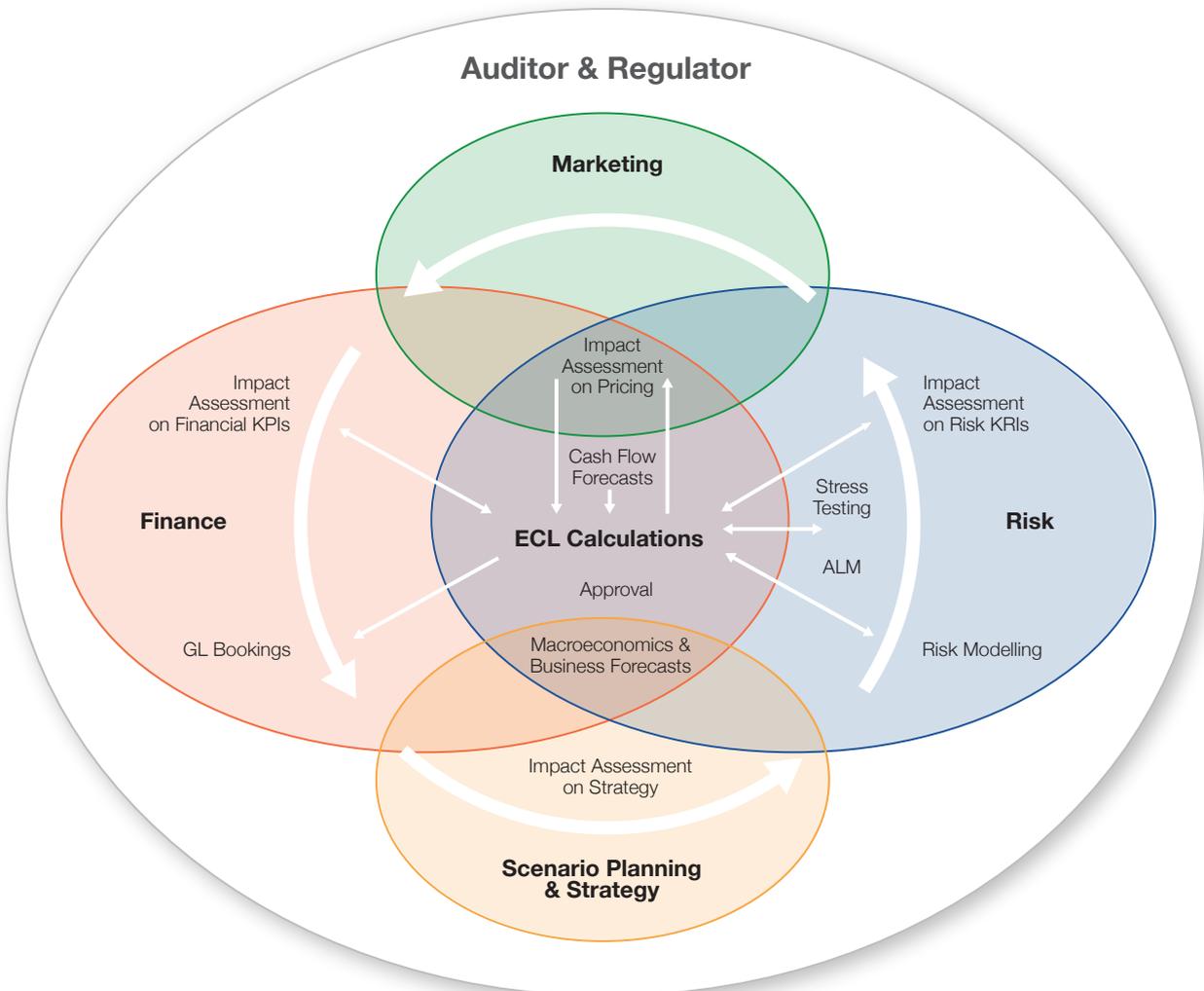

Figure 2: Overlaps between IFRS 9 processes and bank processes in other areas.

Audit Preparation

Each bank's provisions fall under the scrutiny of statutory audits. Therefore, a bank must be prepared to explain to an auditor which controls it applied in each step of its end-to-end ECL measurement process and why certain methodological choices were taken or rejected.[14] Documenting the models, processes and assumptions used – which will be essential to producing a defendable assessment to auditors – will require significant effort.

As confirmed by the Deloitte survey, the role of the bank's regulator in the IFRS 9 implementation will be even stronger than that of the auditor. And one of the most challenging areas of an IFRS 9 implementation will be ensuring that how banks chose to interpret the new rules is deemed acceptable by the auditor and regulator.[15] For these reasons, the more documentation, evidence and controls that a bank builds into its compliance process to support its case, the higher the probability its approach will be considered acceptable. Changes may still be requested by external auditors as industry best practice evolves, and implementing changes on short notice necessitates a robustly controlled environment and a flexible solution that can accommodate alternative methodologies.

What Does Optimal Compliance With IFRS 9 Look Like?

While addressing the challenges described above, banks also have to balance the financial impact and implementation effort associated with IFRS 9 requirements. With an optimal approach to compliance, SAS recognises that banks can achieve an acceptable impact of IFRS 9 on both the finance side (KPIs) and risk side (KRIs), with the least implementation effort, and in a sufficiently prudent manner to ensure compliance.

Figure 3 illustrates who needs to be supported by an optimal approach to compliance – including the processes they are responsible for, and the interdependencies between them.
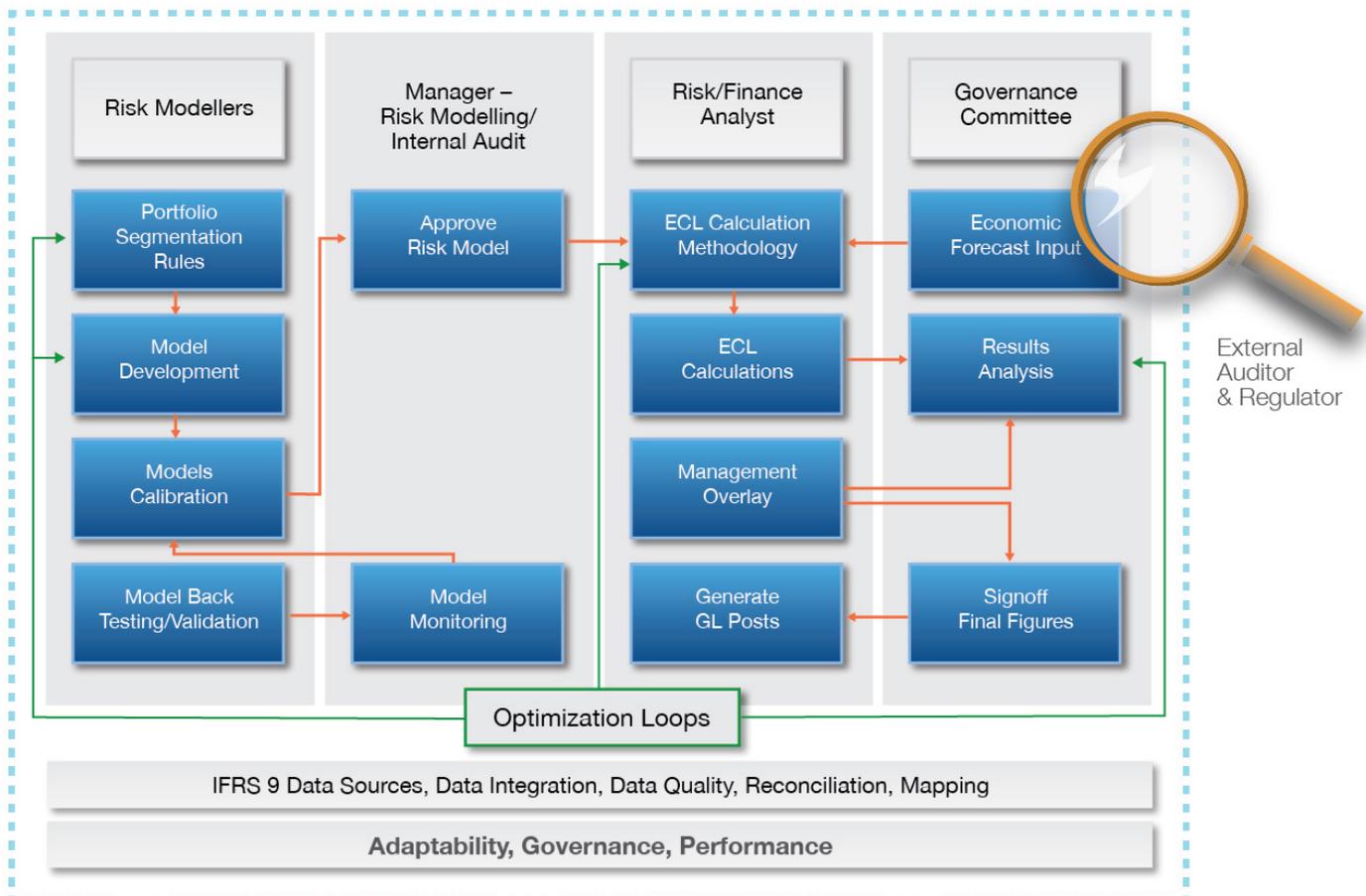

Figure 3: An overview of an optimal IFRS 9 impairment calculation process.

The following sections highlight eight steps that banks should take to reach optimal compliance with IFRS 9.

1. Inventory Existing Processes and Systems

Optimal compliance with IFRS 9 will require significant flexibility, governance and performance in terms of processes and technology. All existing, relevant bank processes and systems should be carefully considered and assessed within the context of new IFRS 9 requirements. For this reason, having a solid understanding of a bank's starting position should be a prerequisite for a successful implementation.

2. Define an IFRS 9 Methodology

Due to the large scope of IFRS 9 and the number of methodological choices involved, banks will need to apply different ECL measurement approaches to different segments of their portfolios. For this reason, the first choice that banks have to make is how to segment their portfolios for the purposes of ECL measurement.

Subsequently, banks will have to derive business rules that will steer the ECL calculations across and within the segments defined above. Within each segment, such rules may include:

- Categorization of financial instruments into IFRS 9 impairment stages 1, 2 and 3 (performing, underperforming, and non-performing, respectively).

- Determination of lifetime expected loss using a simplified approach (based on an estimated ratio for loan losses allowance) or a complex approach (where it's calculated for each instrument using full cash flow generation).[16]

- Requirements for expert adjustments and approvals in the ECL calculation process.

- Treatment of financial instruments on an individual or grouped basis.

- Assignments of a specific model version to estimate ECL parameters.

These rules will create further subsegments, each with a unique ECL measurement process. To arrive at the optimal methodology for ECL measurement, banks will need to go through numerous iterations, identifying and making step-by-step improvements and assessing their impact.

3. Bring Together and Manage the Right Data

Once an optimal methodology is defined, banks need to aggregate relevant data from data sources across the organization and bring it into an automated, centralized test environment. But given that data integration, provisioning, quality and aggregation continue to pose numerous challenges for most institutions, this may not be an easy task. In addition, tracing and documenting data transformations needed for proper governance and auditability is often time consuming, inefficient and incomplete.

Data reconciliation with finance and risk systems at any step of the ECL measurement process will be the key for the auditors, as well as the regulators, who are increasingly paying more attention to the management and usage of the risk data.[17] The data environment used for IFRS 9 needs to address the above, be auditable and also flexible enough in order to quickly adapt to any changes in the underlying methodology. This can be achieved by giving more control to the business people who can obtain new data or alter existing data themselves without putting additional pressure on IT resources.

4. Develop and Manage Models

To address the modeling challenges discussed earlier in this document, banks need to have technology in place that can support an end-to-end modeling process that will handle a large number of models, ensure auditability, and quickly assess the impact of changes in modeling assumptions and their deployment. This process also needs to allow banks to use previous modeling work, adjust models quickly, and easily reuse models for other purposes. Success in these areas will greatly affect the implementation effort and financial impact of IFRS 9.

5. Design ECL Calculations

After the modeled inputs are obtained, ECL calculations for each subsegment of the portfolio are performed following the methodology defined in Step 2. Even within a particular calculation type, banks must choose from a number of calculation choices.[18] As with steps 2 and 4, banks should be aware of all these choices and their respective impacts.

In order to tackle the number and frequency of the ECL calculations, the ECL calculation engines need to offer high performance in a controlled customization environment so that analysts can easily adjust and redeploy different calculation approaches and data sets as inputs.

6. Derive Results, Analyze and Rerun

Once ECL calculations are performed, banks can use analytical engines to assess the financial impact. Due to the strong connection between calculations of the financial KPIs and risk KRIs, this will require full recalculations in most cases.

In order to achieve optimal results, banks will need to revisit their methodological choices, understand their impact and the impact of alternatives, and rerun calculations and analyses as needed. For this reason, it's important that the underlying end-to-end technology is traceable (for governance and audit purposes), as well as usable by business people so they can perform this work themselves (rather than having to rely on IT to implement each methodological change).

Storing the results in one central location together with the inputs and applied methodological choices will enable full transparency, as well as provide a base for ongoing efficiency monitoring of the underlying methodology over time, which can then lead to further improvements.

At the end of the whole process, banks should choose the overall methodology that offers the optimal financial impact while ensuring compliance with IFRS 9 requirements.

7. Make Decisions

Widespread "internal use" of IFRS 9 ECL figures is important in order to show the auditor and regulator that the bank's methodology is robust and reasonable. But in order for IFRS 9 ECL to play an important role in decision making, banks must have all relevant data (inputs, outputs and assumptions) stored in one central location to facilitate efficient sharing of information across the organization. Business stakeholders throughout the organization must be able to access, analyze, review and report this data themselves – and the technological approach taken should minimize the number of intermediate steps required to move data from the source to the decision maker. Self-service technology increases the speed of decisions, reduces the number of potential bottlenecks, and minimizes the likelihood of errors occurring.

8. Reuse Technology

Once the technology environment is in place, then the various components can be reused and redeployed to address other regulatory and internal challenges. This allows banks to share the technology costs across different units and projects and decrease the implementation effort needed for IFRS 9 compliance. It also allows banks to work toward a common supporting infrastructure that eases the governance, auditability and transparency of processes. Many of these processes are siloed and yet are interdependent at the same time – so it makes sense that they share data and models.

Using Technology to Optimize IFRS 9 Compliance

Throughout this discussion, we've called out the need for the proper technology to support a bank's path toward optimal IFRS 9 compliance. There are several key features banks must look for in their supporting technology.

Functionality That Empowers Business People

Due to the broad impact of IFRS 9 on the business and the number of choices and consequences involved, it is imperative that business people play the lead role when end-to-end processes are being set up and adjusted. The primary role of IT is to provide and maintain the technology environment that will enable business people to do this with ease. If business people have to make IT change requests for each methodological change they are considering, then they will find it impossible to apply the principles outlined above, making optimal IFRS 9 compliance unattainable.

Performance

The large volume and granularity of data – combined with the complexity of the calculations applied to it to comply with IFRS 9 – will create substantial pressure on the underlying technology that banks are currently using.[19] Business people simply won't be able to wait 20 hours, for example, to run a full recalculation based on an adjusted methodology. As a result, banks will need new, high-performance technology that can scale to meet business needs.

New technology may also be needed to support the significant role that humans play in the end-to-end IFRS 9 accounting process. For example, when people have to manually aggregate and move data around various databases and subsystems, it takes time – too much time – resulting in bottlenecks that increase the total running time of processes. Moreover, these delays occur regardless of how powerful the systems used for running calculations may be. Integrated technology that uses a central data store, natively connects with both internal and external engines, and delivers workflow and self-service capabilities limits the need for human involvement to situations where it's truly needed. And as a result, it can dramatically decrease bottlenecks and accelerate processes.

Governance

With IFRS 9 will come greater bank scrutiny by both statutory auditors and regulators.[20] So it will no longer be acceptable to have data values altered, either automatically or manually, without following a controlled process with a proper, documented explanation. Therefore, banks will need technology solutions that provide for an environment that supports efficient documentation, strong governance, change controls, model management, traceability, workflow and audit trails.

Connectivity and Reuse

Final ECL results will be used as important inputs for other bank processes (as shown in Figure 2). At the same time, the technological capabilities required for IFRS 9 compliance can be used to address other regulatory challenges and internal processes related to:

- Stress testing and enterprise risk management.
- Risk data aggregation and reporting (BCBS 239).
- Regulatory capital calculations and forecasts.
- Capital planning and scenario analysis.

So when planning implementations for IFRS 9, banks should look for technology that offers connectivity to third-party engines, as well as adaptability to support other business needs.

Partnering for Optimal IFRS 9 Compliance

Banks planning for IFRS 9 compliance are likely going to need to invest in new and complementary information technology to meet performance, data management, analytics, integration and other requirements. So choosing the right solution provider – one with the right banking industry experience, IFRS 9 expertise and broad solution capabilities – will be vital to success.

Since 1976, SAS has worked with the banking industry to provide solutions that deliver all of the functionality needed for optimal IFRS 9 compliance. SAS® solutions for optimizing IFRS 9 compliance include leading technology that enables:[21]

- Data management, integration and aggregation.
- Data quality and data governance.
- High-performance analytics and reporting.
- Model development and deployment.
- Business rules management.
- Model risk management.
- Forecasting, scenario management and capital planning.
- Risk and econometric calculation engines.
- Connectivity to third-party engines.

To learn more about SAS solutions for managing risk and compliance, please visit sas.com/risk.

Endnotes

1 International Accounting Standards Board press release, "IASB completes reform of financial instruments accounting," July 24, 2014.

2 International Financial Reporting Standards (IFRS) 9 consists of the components: 1) Categorization and Measurement, 2) Impairments and 3) Hedge Accounting. In this paper we address the Impairments part, which we refer to as IFRS 9 in this paper. IFRS 9 effectively replaces the current impairment regime (IAS 39).

3 Fifth Global Banking IFRS Survey: Finding Your Way, Deloitte, May 2015.

4 Subject to endorsement of the local jurisdictions with early adoption allowed.

5 BSCS 239: Principles for Risk Data Aggregation and Reporting applicable for Globally Systemically Important Banks (G-SIBs) and depending on the local regulator; also for Domestically Systemically Important Banks (D-SIBs).

6 FASB – Financial Accounting Standard Board, which is IASB's equivalent for the US market. The Current Expected Credit Loss (CECL) model amendments proposed by FASB are still in draft stage, but will result, as in the case of IFRS 9, in change from the existing incurred loss model to an expected credit loss model. Remarks made throughout this document on IFRS 9 will very likely be relevant also for the CECL.

7 For certain portfolio segments, some banks expect the increase to be even greater than 100 percent (e.g., expectation of 6 percent of banks for the SME segment).

8 The methodology differs according to the regulatory approach adopted by the bank, applies cutoffs based on reconciliations of ECL with Basel Expected Loss calculations, and involves calculation both on individual and aggregated assets levels.

9 Provisions are the key item for the stress testing, scenario analysis, capital planning and budgeting processes.

10 IFRS 9 allows for ECL measurement to group certain financial instruments with similar characteristics; however, the grouping needs to be dynamic enough to reflect any changes in portfolio/market/credit developments. For details see Principle 3 of the Guidance on accounting for expected credit losses of BCBS.

11 Fifth Global Banking IFRS Survey: Finding Your Way, Deloitte, May 2015.

12 For example, banks will need to estimate the impact of a future default on expected cash flows across the whole lifetime of a mortgage loan while also considering in the forecast information like timing of these cash flows (e.g., prepayments) and the impact of relevant macroeconomic and market variables (e.g., future values of interest or foreign exchange rates).

13 For example, unless there is a reason (e.g., regulatory), it is not desirable from an efficiency or a governance point of view for a bank to use different future estimates of risk-free interest rates for IFRS 9, ALM, Basel calculations, etc.

14 Banks also need to be prepared to explain any differences in the underlying approach for the ECL measurement compared to the approaches used in other areas (see the example earlier in the section).

15 Fifth Global Banking IFRS Survey: Finding Your Way, Deloitte, May 2015.

16 IFRS 9 allows for simplified approaches for certain portfolio segments with similar characteristics.

17 BCBS 239: Principles for Risk Data Aggregation and Reporting.

18 For example: The choice of interest and FX rates for mortgage cash flow discounting can raise questions like, "Is one flat rate sufficient for the whole time horizon?" and "Should a curve be used instead?", or alternatively, "Should multiple future scenarios be used?" Each alternative will have different impact on KPIs and KRIs.

19 A large part of ECL calculations will be performed on the individual asset level.

20 For more details, see principles 9 to 11 of BCBS's Guidance on accounting for expected credit losses.

21 See Gartner Magic Quadrants for Advanced Analytics Platforms, Business Intelligence and Analytics Platforms, and Data Quality Tools; IDC's MarketScape for Credit Risk Analytics Solutions; Forrester Wave™ for Big Data Predictive Analytics Solutions; Chartis RiskTech Quadrant for Model Risk Management, Basel 3 Technology Solutions.

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