› Solution Brief

Business Impact

SAS is recognized as the leader in risk analytics, according to Chartis Research Enterprise Stress Testing Systems 2015 and IDC's Credit Risk Analytics MarketScape 2014.[1]

Challenges

- **Greater scrutiny by auditors.** With IFRS 9/CECL, statutory auditors will require more scrutiny, justification and documentation of impairment risk models.
- **Concerns about collecting the necessary data.** Moving from an incurred loss model to an expected loss model means a wider scope of data must be considered. And because the risk models involved are more complex, data must be more detailed.
- **High level of uncertainty regarding capital impacts.** Because IFRS 9 guidelines are principles, there's uncertainty and debate around the impairment rules and capital impacts.
- **Complex credit risk modeling and calculation demands.** To accurately forecast credit losses, banks need new or updated systems and complex models that use more data.

Estimate expected credit losses for IFRS 9/CECL compliance using a streamlined, end-to-end process

The Issue

Compliance with financial reporting standards (IFRS and FASB) is about to get a lot more complex. Starting in 2018, a new set of rules (IFRS 9 outside the US and CECL inside the US) for financial instruments will be applicable to companies across all industries, affecting the treatment of financial assets measured at amortized cost, financial assets measured at Fair Value Option Comprehensive Income, and lease receivables.

But for most banks, the biggest challenge of IFRS 9/CECL will be accurately predicting expected credit losses (ECLs). This will require totally new types of credit loss models that must be generated using analytical and statistical approaches not currently used for this activity. For most banks, this will necessitate enhancing their systems, updating credit loss models, and in general, creating totally new models.

Moreover, due to expected higher volatility in the impairment estimates, banks will raise provisions. This will put additional pressure on bank capital, which has already been squeezed by evolving Basel III requirements.

Given these challenges, it's time for an impairment revolution -- one where banks move from accrual basis ECL estimations to a forward looking, model-based ECL that streamlines the process for estimating credit losses. This will require new data, new systems, expert skills and appropriate methodologies.

Our Approach

SAS' comprehensive, modular platform supports both stress testing and the full IFRS 9/CECL ECL calculation process, from modeling, governance, data management and impairment estimation to accounting posting, reporting and forecasting. Use it to:

- Collect data and ensure proper governance. Automate data collection and maintain full control over what data is used for calculations and models.
- Centrally run and manage impact analysis. SAS® streamlines the model implementation process, eliminating the need to write out model requirements and invest time moving models to production. All models are stored and run from one place.
- Use one solution for end-to-end processing. Perform data capture, ECL calculations, adjustments and accounting journal postings and model execution using in-memory, grid-parallel processing. Extremely fast run times and adaptive aggregation of results enables quick analysis and decision making.
- Run forward-looking ECL calculations. Develop, test and calibrate risk models using a SAS library of procedures, scoring models, and forecasting models, including Point in Time PD and LGD models needed to support the IFRS 9 standard.

[1] Chartis RiskTech Quadrant® Enterprise Stress Testing Systems 2015 (http://www.sas.com/content/dam/SAS/en_us/doc/analystreport/chartis-risktech-quadrant-enterprise-stress-testing-107872.pdf) and IDC MarketScape: Worldwide Credit Risk Analytics Solutions 2014 Vendor Assessment (http://www.sas.com/en_us/news/analyst-viewpoints/chartis-stress-testing-leader.html)

sas®
THE POWER TO KNOW®

The SAS® Difference:
Providing end-to-end coverage of the IFRS 9 impairment process

SAS supports both stress testing and the entire IFRS 9 compliance process by enabling you to:

- **Determine the best models to use**. Use point-and-click model integration to simulate ECL impacts, analyze model quality and appropriateness for different scenarios and modeling approaches, and select the best ones to implement.
- **Make asset-level credit impairment estimates**. SAS analytical and language capabilities, including PD and LGD model development, set the solution apart. SAS risk engines are widely used to calculate at detail and aggregate levels.
- **Reduce implementation times**. Use easy model management functions to group models, define how they work together for the ECL calculation and select which models and scenarios to apply to business lines and products.
- **Integrate risk and financial modeling**. Use a centralized data and model repository for storage and a transparent and governed process for data collection, model testing, calibration and approval.
- **Full coverage of the impairment process**. Use SAS for data capture, a suggested data model, tools for model development and risk engines for model execution, and functions for management and regulatory reporting and preparing accounting posting journals.

Case Study:
A Tier-1 International Banking Organization, headquartered in London

Situation

A tier-1 bank with approximately 2,000 offices in more than 70 countries needed an easy-to-deploy, end-to-end solution to comply with the IFRS 9 standard.

Solution

SAS proposed an enterprisewide deployment of its IFRS/CECL platform, the only solution capable of dealing with very large, complex data using an in-memory processing risk engine. The platform integrates with Hadoop and the company's existing reporting tools.

Results

- The company can use its existing SAS infrastructure, including existing models and in-house IT capabilities.
- Users can swap models, quickly run ad hoc scenarios and create loan-level models on large loan portfolios using in-memory processing.
- Users can easily drill down into results within the integrated internal management reporting, which is in sync with the generated accounting posting.
- Transparent, replicable model execution in a controlled environment supports new governance and auditability requirements.
- The time between model development and model implementation has been reduced to hours.

What if you could …

Test different scenarios with ease?

What if you could try different modeling approaches for ECL calculations and instantly test different scenarios in a point-and-click environment?

Quickly develop new models?

What if you could have a user-friendly environment to develop PD, LGD models using the powerful SAS analytical capabilities you are already know?

Centralize and streamline IFRS 9 compliance?

What if you could centralize your IFRS 9/CECL process in one flexible system; collect all necessary data; and validate, reconcile and automate the generation of accounting posting journals?

You can. SAS gives you THE POWER TO KNOW®.

SAS Facts

- SAS is recognized as a leader in advanced analytics and end-to-end risk management by global analyst firms, including in the recent 2015 RiskTech Quadrant for enterprise stress testing systems from Chartis Research.
- SAS is being used by financial regulatory agencies to monitor risk in the banking system around the world. Over 100 banks globally use the SAS regulatory capital solution for filing with regulators.
- 90 of top 100 global banks use SAS for risk modeling, calculations and reporting.

Learn more sas.com/en_us/insights/articles/risk-fraud/better-it-and-data-practices-can-prepare-banks-for-ifrs-9-convergence.html

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