



TOPICS:

Market Risk

SOURCE:

[International Swaps and Derivatives Association](#)

ISDA: Capital Models Benchmarking - A Framework for Counterparty Credit Risk Internal Models

- The paper proposes **an industry-wide benchmarking framework for validating counterparty credit risk (CCR) internal models** used in regulatory capital calculations. The paper addresses the challenge that firms applying advanced CCR models inevitably make differing assumptions regarding data, calibration methods, simulation techniques and system architecture, which can lead **to significant variability in exposure and capital outcomes**.
- The framework is intended to complement traditional internal model validation by **introducing structured peer benchmarking** using hypothetical portfolio exercises (HPEs). Unlike firm-specific validation tools, benchmarking enables cross-sectional analysis of whether a firm's model outputs are materially different from peers facing comparable risks. ISDA emphasizes that benchmarking should extend beyond headline metrics to include intermediate outputs, exposure profiles, risk factor distributions and qualitative modeling assumptions.
- A central feature of the proposed framework is the **use of standardized**

- **hypothetical portfolios covering interest rate swaps, FX forwards and inflation swaps** under common legal agreements and collateral terms. Firms submit metrics such as expected positive exposure (EPE), effective expected positive exposure (EEPE), collateral distributions and Monte Carlo simulation outputs. These data are analyzed using standardized CRIF data formats and supported by ISDA Analytics and the LSEG Open-source Risk Engine (ORE), which acts as an independent analytical benchmark.
- The paper highlights **several drivers of model variability**, including stress calibration periods, simulation grid granularity and volatility calibration methodologies. To distinguish legitimate methodological differences from potential weaknesses, the framework combines quantitative benchmarking with qualitative surveys and statistical outlier detection methods such as median absolute deviation (MAD). ISDA also discusses future enhancements involving machine-learning techniques for multi-measure outlier analysis.

