

# **Risk.net** Market Technology **Awards** **2018**

Risk.net December 2017



**MOODY'S**  
ANALYTICS

# Moody's Analytics

## Solvency II product

**T**he RiskIntegrity Suite offers a comprehensive risk and solvency application, with ready-to-use Solvency II-standard formula and internal modelling capabilities – including solvency capital and minimum capital requirement calculations, and integrated regulatory reporting.

The standard formula module supports a stress-and-correlate approach to capital calculations, and includes Solvency II regulatory datasets covering prescribed formula, stresses and correlation matrices for the various capital calculations. The internal model module supports the automation of processes for calculating solvency capital requirements and managing internal economic capital, and it includes a proxy generator for calibrating proxy functions for the simplified modelling of asset and liability values. A risk scenario-generator module produces one-year value-at-risk scenarios for market and non-market risks.

The regulatory reporting module can use the outputs from other RiskIntegrity Suite modules, alongside imported results from third-party systems. The languages, formats and templates of the European Insurance and Occupational Pensions Authority reports for all European Union supervisors are supported.

Over the past 12 months, the company has made several enhancements

to the RiskIntegrity Suite, specifically to support Solvency II modelling, including adding a strong mean-reversion sub-model to the extended, two-factor Black-Karasinski nominal yield-curve model, to give more control over interest rate distribution for real-world simulations.

### Judges said:

"A comprehensive Solvency II solution, particularly for standard model firms."

"Part of a broad insurance offering."

"Excellent company."

### Moody's Analytics says:

Colin Holmes, managing director of insurance solutions, Moody's Analytics: "The RiskIntegrity Suite and scenario-generation solutions are designed to address the risk and solvency enterprise risk management needs of insurance companies, for both regulatory and internal management purposes. The comprehensive modular solution helps insurers manage a wide range of finance and risk data, produce risk and solvency analytics to support risk-based decision-making, and generate regulatory and business reporting." ■

## Regulatory reporting product

**T**he regulatory reporting module of Moody's Analytics RiskIntegrity Suite for enterprise solvency and risk management aims to simplify the demands of Solvency II Pillar 3 reporting by capturing and consolidating data, and automating the submission of quantitative reporting and national country templates. The module supports the major reporting data-format standards used by regulators, including XBRL, XML and Microsoft Excel.

Features of the module include the ability to move from consolidated information down to the underlying data for in-depth understanding of what is being reported, along with comprehensive audit control to capture and report on all changes to the data before, during and after the reporting process. Automated validation rules check to ensure the quality and coherence of reports. Audit changes can be made down to the level of individual cells to maintain data quality and integrity, and enforce the corporate data policy. Regulatory reporting demands tight control over who can access the systems and what they can do with the data, so the module offers comprehensive user-access management.

Users can store, manage and access historical regulatory data to provide detailed trend analysis for both regulators and management. They can also

create customised business reports, which can be exported to Microsoft Excel spreadsheets or presented graphically in chart form.

### Judges said:

"A comprehensive reporting suite."

"Complete end-to-end offering for insurance companies, well supported by client testimonials."

"Modular-based architecture offers sufficient flexibility to tailor the solution to evolving industry needs."

### Moody's Analytics says:

Colin Holmes, managing director of insurance solutions, Moody's Analytics: "The RiskIntegrity Regulatory Reporting module simplifies the demands of Pillar 3 reporting by capturing, consolidating and reporting data to deliver the quantitative reporting templates. It deals efficiently with the reporting requirements, and provides a strategic platform for all the data and quantitative reporting aspects of Solvency II, and risk and capital management." ■

## Stress-testing product

**M**oody's Analytics' Scenario Analyzer is a flexible application for bringing data, scenarios, models and reports into repeatable and auditable automated processes for stress testing and forecasting. The product covers a wide variety of use cases, including management stress tests and regulatory compliance across mandates, such as those of the European Banking Authority, Federal Reserve, Hong Kong Monetary Authority and UK Prudential Regulation Authority.



Andrew Bockelman

Scenario Analyzer centralises economic, risk and financial data into a single data mart, providing a 'single source of truth' for all stress-testing and forecasting operations, with full auditability of data. This data can be provided at various levels of granularity, checked for errors, enriched through business rules, and reviewed and adjusted by business users, as required. A centralised model catalogue enables users to deploy a spectrum

of models, including Moody's Analytics' off-the-shelf offerings, as well as internally developed ones. Reporting capabilities are directly connected to the data and model outputs.

Scenario Analyzer enables users to configure the combination of steps they require for a stress-testing process, spanning data operations, model calculations and user interactions. Recent performance improvements include enhanced parallel-processing capabilities, enabling the distribution of scenario calculations across a scalable number of servers, with in-memory calculations and optimised data management.

### Judges said:

"One of the most comprehensive stress-testing products in the market."  
"Not only a solid stress-testing framework, but helpful data provision as well. Ahead of the market."

### Moody's Analytics says:

Andrew Bockelman, managing director, Moody's Analytics: "The Moody's Analytics Stress Testing suite helps our clients automate sustainable stress-testing programmes that are comprehensive, transparent and repeatable. Our solution combines data, analytics and software to empower financial institutions to meet evolving regulatory stress-testing requirements while supporting their risk management, strategic planning and other core business activities." ■

## Economic scenario-generation product

**M**oody's Analytics offers an economic scenario generator and a suite of ESG solutions comprising leading-edge stochastic models, software modules and services. These enable insurers and other financial institutions to assess group-wide economic and regulatory capital needs, develop capital management strategies, and price complex embedded guarantees and options.

On the real-world modelling side, insurers and other investment-focused firms can calibrate the ESG to reflect their own views for internal models, or use the Moody's Analytics embedded standard calibrations as a starting point for their work or as an external validation of their views. The ability to reflect in-house views on risk-return characteristics, as well as the flexibility to model a range of assets and strategies, is also important to asset managers and investment advisory firms, where there is a growing trend to adopt ESGs for modelling.

On the market consistency side – where low and negative interest rate modelling continues to be a major requirement – Moody's has helped clients transition to new interest rate models or approaches to calibration, such as using normal or absolute implied volatilities. Most clients are now using the Moody's Analytics flagship Libor market model with the

stochastic volatility (LMM+) interest rate model, although the firm also upgraded its ESG suite to offer a wide spectrum of calibration, automation and validation capabilities for simpler or short rate-based models.

### Judges said:

"The most well-established and widely used ESG in the industry, with excellent client testimonials. Comprehensive offering; continuously developed and extended in terms of functionality and delivery."  
"Great product and service."  
"The default choice in the insurance sector."

### Moody's Analytics says:

Colin Holmes, MD of insurance solutions, Moody's Analytics: "Moody's Analytics ESG solutions combine software, modelling and configuration in a comprehensive package to provide insurers with effective solutions for risk, capital and solvency management, reporting and financial modelling. Our ESG solution is widely used in the global insurance industry to support a range of risk management needs, from liability valuation and capital calculation to asset-liability management." ■

# Revisit Your Stress Testing Capabilities under IFRS 9

Moody's Analytics offers an award-winning, powerful, and flexible solution for stress testing operations, including scenario definition and calibration and forward-looking assessment of provisions.

We help our customers meet a wide range of mandates, including: European Banking Authority (EBA), Federal Reserve Comprehensive Capital Analysis and Review (CCAR), Internal Capital Adequacy Assessment Process (ICAAP), Dodd-Frank Act Stress Tests (DFAST), Prudential Regulation Authority (PRA), and Hong Kong Monetary Authority (HKMA).

Our solution helps you efficiently execute an enterprise-wide process by bringing together the relevant data, scenarios, models, and reports into a repeatable and auditable automated process.

Visit [MoodyAnalytics.com](https://www.moodyanalytics.com) to learn more from our experts.

**MOODY'S**  
ANALYTICS

