RISK MANAGEMENT SERVICES

Moody's Analytics Knowledge Services is uniquely positioned to help financial institutions in the regulatory risk management space by providing support, guidance, and services that span across the lifecycle of model management and thought leadership on the rapidly evolving regulatory landscape through unrivalled, end-to-end solutions.

We work with some big names in the banking industry across geographies with model development, model validation, model documentation, reporting, change management activities for market risk, credit risk, stress testing, and operational risk. We house strong risk and quantitative modeling capabilities with deep understanding of product/portfolio domains, modeling theory, and modeling tools. We also provide flexible staffing of Risk Specialists (On-shore/Off-shore) who can hit the ground running to help banks meet regulatory deadlines.

Introduction to Our Risk Management Services

Data Management and BI

Data Management
- Data migration - ETL
- Master data mgmt.
- Data connectors

Business Intelligence
- BI consulting
- Data warehousing
- Reporting/dashboard
- BI tool integration

DB/BI Analysts

Model Development and Validation

Credit Risk
- PD models
- LGD models
- Wholesale and retail
- Basel and IFRS 9

Market Risk
- Valuation models
- VaR models
- OTC and traded
- Basel II.5 and FRTB

Stress Testing*
- Econometric models
- Scenario expansion
- Portfolio stress testing
- FED/EBA/PRA

ICAAP/Econ. Capital
- ICAAP - method, model
- Risk aggregation
- NMD modelling
- Basel Pillar II

Model Documentation

Drafting
- Regulatory expectation
- Grammar and editing
- Document formatting

Quality Analysis
- Quality assurance
- Logical consistency
- Technical accuracy

Quant Analysts

Market Risk

MA Knowledge Services has knowledge in trading book product pricing models and market risk methodology models across asset classes. Our team also ensures coverage of all aspects of regulatory guidelines and requirements while performing any market risk modeling, validation, or documentation.

Our deep knowledge in pricing and risk theories, regulations, modeling concepts (stochastic calculus, PDEs, numerical methods, statistics), and coding (C++, Python, R, Matlab, client proprietary languages) have given us the deep-rooted foundation to support banks across various activities in market risk.

Apart from working extensively on VaR-based market risk models, we have experience and regulatory understanding on implementing standardized approach for FRTB.

Credit Risk

MA Knowledge Services has credible expertise and pedigree in credit risk modeling development and validation. Given its deep experience with banks across regulations, the team has extensive domain understanding across various wholesale and retail portfolios, modeling of credit risk components, and the various modeling techniques involved.

Our risk modeling team comprises of doctorates, postgraduates, and graduates in statistics, economics, and engineering. The team has closely worked on Basel regulations in expected loss and also on IFRS 9 impairment modeling. Be it low default portfolios, specialized portfolios, and portfolios that require complex modeling, we have experience in working across the length and breadth of PD and LGD models.

We also offer services in credit risk BAU models, including origination, collection, and recovery models.

Stress Testing

MA Knowledge Services has deep understanding of stress testing regulations in both the US and Europe. We have been involved in scenario modeling, loss estimation, and PPNR modeling for banks.

Given our extensive exposure across credit, treasury, and market risk portfolios and their corresponding models, we closely monitor micro model dynamics to ensure that macro models effectively connect with them.

Apart from model development and model validation of stress testing models, we have also been working with European banks on PRA Stress Testing submission.

Risk Reporting and Data Management

Our team of specialists also support the Risk Management teams of major banks and other financial institutions in monitoring, documenting, and reporting key risk parameters. Our analysts also provide round-the-clock risk-run support, calculating mark-to-market values, VaR, and other relevant risk-control factors. With banks required to comply with the BCBS 239 guidelines on data aggregation and management, they face several cross-departmental challenges that need specialized solutions.

Clients have leveraged our experience in advisory evaluation of systems and automation, as well as in providing impactful qualitative improvements, to achieve tactical and strategic benefits.

SKILL INVENTORY

Modeling

» Stochastic Calculus, Matrix Algebra, Optimization, Simulation, Time Series, Multivariate Analysis

» Derivative Pricing Models, Volatility Modeling (Multivariate GARCH), Correlation-Copula Modeling, Risk Modeling (VaR,PD,LGD,EAD), Credit Scoring, Logistic Regression, Decision Trees

Statistical tools

» SAS, MATLAB, Mathematica, Octave, S-Plus, R, Stata, EViews, Minitab, Gauss, D3, Tableau, TSP

Data sources

» Bloomberg, Reuters 3000Xtra, Reuters Datascope, Datastream, MSCI, IBES, Worldscope, FactSet, Markit, MarketQA, Compustat, IDC, RIMES, proprietary data sources provided by clients

Technology

» C, C++, .NET (ASP.NET, VB.NET, C#), Java, XML, VBA, PERL, Python, MS Access, SQL Server 2005, MySQL, Oracle, CUDA, Hadoop

For more information on our **Risk Management Services**, email us at contact_maks@moodys.com

About Moody's Analytics Knowledge Services

We enable organizations to innovate and transform in an ever-changing world. Our global pool of domain experts enables businesses to innovate, scale, and reduce costs. Providing customized solutions is in our DNA – solutions that have a tangible impact on our clients' top-line and bottom-line, enabling them to achieve more with less.

Our clients include leading bulge-bracket financial institutions, asset managers, Fortune 100 corporations, mid-tier companies, boutique investment banks, and funds. We support over 150 institutional clients through our team of 2,600+ employees and our global delivery centers, located in close proximity to our clients.

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