RiskFrontier

RiskFrontier is the portfolio management and economic capital solution trusted by leading financial institutions. It is a scalable platform that identifies a portfolio's risks and opportunities allowing for improved strategic decision making and performance.

The Challenge: Managing a Complex Portfolio with a Competitive Edge

In today's competitive market, financial institutions face the increasing challenge of managing risks in complex portfolios—which often include exposures from a variety of asset classes, a number of industries and across borders. In addition, portfolio managers face unprecedented pressure from regulators, investors and executives to articulate credit risk strategies and portfolio management techniques. To achieve compliance and stay ahead of their competitions, financial institutions need a reliable solution that combines sophisticated analytics with robust technology to help them gain the most insight into the drivers of risks and identify strategies to achieve the best possible return on their investment.

Find the Best and Worst Performers, Change Portfolio Composition, Improve Performance
RiskFrontier

The Solution: Portfolio Management and Improved Decision Making while Achieving Transparency

Understand Your Portfolio
RiskFrontier enables you to perform rigorous analysis of credit risk and economic capital, which is critical to Basel II and Solvency II compliance. It also identifies risk concentrations by industry, geography or asset type, computes expected and unexpected loss, and calculates distributions of portfolio values, losses and capital.

Make Better Strategic Decisions
RiskFrontier helps you understand which incremental steps to take to improve portfolio performance. It identifies a portfolio’s top and poor performers, as well as those exposures that are mispriced (those not earning enough spread given the risk they contribute to your portfolio). RiskFrontier also allows you to determine optimal buy/sell quantities, perform risk-return analysis for hedging strategies and quantify required return on new investment opportunities to optimize a portfolio’s risk-return performance. With an aggregated and granular view of your portfolio, you will be positioned to make informed decisions about the strategic direction of your portfolio.

Achieve Transparency
RiskFrontier offers the ability to perform what-if analysis and stress testing using different model assumptions to determine losses and assess capital adequacy under changing economic conditions. This, coupled with RiskFrontier’s intuitive interface and robust reports, makes it easy to articulate the sensitivity of economic capital calculations, as well as portfolio management strategies to a variety of stakeholders.

This graph shows two capital distributions of two different portfolios. Red has a much fatter tail, suggesting it has a significantly larger capital requirement.
The Difference: A Comprehensive Correlation Model, Incremental Deal Analysis, Open Model Framework

A Comprehensive Correlation Model
RiskFrontier is built on GCorr (Global Correlation Model), a multiple factor correlation model that infers the correlation of risks between a variety of asset types (corporate, CRE and retail) and their related factors (industry, geography, property type and retail product type). GCorr is calibrated from a reliable and global empirical dataset of publicly traded corporations, retail credits and commercial real estate loans that span several business cycles. This model is updated regularly to capture current dynamics. GCorr is also fully transparent: Moody's Analytics publishes research on updates or changes to the model and underlying data.

Incremental Deal Analysis Using DealAnalyzer
DealAnalyzer uses RiskFrontier's powerful analytics to quantify the impact a deal has on a portfolio's performance. It applies a consistent model framework to portfolio management and deal origination by providing incremental capital figures for new or prospective buy/sell decisions. It introduces real-time, active portfolio management to the origination process and allows you to quickly assess deals in the context of your overall portfolio holdings.

Transparent and Flexible Framework
RiskFrontier has a robust and transparent data management technology, which allows clients to easily import, store, and extract input as well as output data. Furthermore, with an open model framework, clients have the ability to use their own models (PD, LGD, credit migration, and correlation assumptions) or use the established models that have been empirically derived from Moody's KMV research. This transparent and flexible framework makes RiskFrontier easier, faster and less costly to implement.

The Toolbox: Key Features

Breadth of Coverage
Risk Frontier covers loans, bonds, CDOs, credit default swaps, basket default swaps, retail credit lines, retail loans, equities and exposure profiles across asset classes (corporate, retail and CRE). RiskFrontier can also model the effects of embedded options, including loan prepayment options and bond call/put options.

Default Risk and Recovery Correlations
RiskFrontier models the relationship between default risk and recovery. Clients who choose to use this feature benefit from an empirically derived model which uses default and recovery data from over 17,000 firms across the globe. Clients have the option to examine the effect of this correlation on portfolio risk and capital.

Scenario Analysis/Stress Testing
RiskFrontier quantifies the sensitivity of your portfolio to stress or alternative scenarios. Easily test your portfolio by changing a variety of factors including PD, LGD and modeling assumptions. RiskFrontier then reports results side-by-side. Users can also move specific exposures in and out of the portfolio—calculating the marginal impact of new instruments.

Technology
RiskFrontier is a cutting-edge, server-based application. Its grid-computing architecture allows massive simulations in a distributed environment. It scales easily to fit the needs of large and complex portfolios and offers an easy-to-use, web-based console for easy monitoring. Control features include permissioning, different work groups and user types (with public/private settings).
Related Products

RiskFrontier is integrated with a wide range of Moody’s Analytics products which extend the solution beyond economic capital and portfolio management.

**Fermat CAD**
CAD computes regulatory capital and helps banks achieve Basel II compliance. RiskFrontier provides banks with an economic capital solution to meet Basel II Pillar 2 requirements (in support of ICAAP).

**Fermat Solvency II**
Solvency II is a comprehensive risk and performance management system designed to help insurance companies comply with Solvency II. RiskFrontier provides insurance companies with an economic capital solution.

**RiskCalc®**
RiskCalc is a network of 25 private firm PD models based on Moody’s Analytics Credit Research Database (CRD) which comprises over 500,000 private firm’s financial statement and default data. RiskCalc offers forward looking probabilities of default (PDs) as an input into RiskFrontier to compute economic capital for the middle market/SME (small and medium enterprises) portfolio.

**LossCalc™**
LossCalc is a loss given default (LGD) model based on our LossCalc database. LossCalc offers forward-looking LGD as an input into RiskFrontier for economic capital calculation.

**CreditCycle**
CreditCycle is an econometric PD and LGD model for retail credit based on Moody’s Analytics economic forecasting analytics and your retail data. CreditCycle offers forward looking PDs and LGDs as inputs into RiskFrontier to compute economic capital for the retail portfolio.

**CreditMark®**
CreditMark is a robust, mark-to-market platform that enables users to accurately value tens of thousands of credit instruments on a daily basis by combining market data, valuation models, portfolio data and instrument terms and conditions.

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**About Moody’s Analytics**

Moody’s Analytics provides strategic solutions for measuring and managing risk. We put the best practices of the entire world of credit, economics and financial risk management at your fingertips, helping you compete in an evolving marketplace. In addition to distributing the credit ratings and proprietary research of Moody’s Investors Service, we offer training and risk management support services as well as leading-edge software that is tuned to your business challenges and powered by sophisticated models.

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We encourage you to try Performance Data Service for yourself. Please contact Moody’s Analytics to learn more, arrange a trial or schedule a personal demonstration. E-mail us at clientservices@moodys.com or use one of the numbers below:

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Asia Risk magazine readers recently voted RiskFrontier the number one economic capital calculation and management/Basel II Pillar 2 solution.