Credit Risk Management for Commercial Real Estate (CRE) Lenders

The Moody’s Analytics CRE suite provides a comprehensive way to measure and manage CRE exposure risk. Our integrated solution helps lenders standardize the way property data is collected, assess CRE risk using probability of default (PD) and loss given default (LGD) measures and stress test loan portfolios to be sure CRE lenders have adequate reserves to withstand an extreme event.

The Challenge: Understanding CRE Exposure Risk

Faced with an increasing demand to quantify risk within CRE portfolios, lenders should be making disciplined CRE lending decisions starting at the point of origination. Institutions that do not capture CRE borrower data in a consistent, standardized manner are left at a distinct disadvantage when it comes time to make portfolio-level decisions, create reports to guide strategic business decisions and satisfy regulatory requirements.

To stay competitive, it is important for firms to analyze individual exposures on a stand-alone basis and to understand how each CRE deal affects their overall portfolio. The practice of balancing best-in-class quantitative models with qualitative data across a firm’s portfolio and geographies results in more accurate loan loss provisions and can inform how lenders price and structure CRE loans.

The Solution: Powerful, Integrated CRE Origination and Credit Products

Our enterprise-class CRE suite allows lenders to quantify and manage commercial mortgage credit risk more precisely than competing products. With our integrated suite of tools, customers are able to make better CRE lending decisions, meet increasing regulatory demands and ultimately manage capital more effectively.

Examples of Credit Issues Addressed

The Moody’s Analytics CRE suite addresses many common credit-related challenges. Here are some examples:

- **Deploy Capital More Effectively**
  - Make better CRE loan decisions

- **Standardized Data Collection**
  - Systematically collect property data across all your offices using CRE data templates

- **Comprehensive CRE Risk Analysis**
  - Measure PD, LGD and expected loss for all borrowers

- **Availability of CRE Default Data**
  - Leverage an exclusive data set with 40+ years of loan-level default information

- **Pricing**
  - Competitively price and structure commercial mortgages, based on your firm’s risk policy

- **Consistent Risk Rating Framework**
  - Evaluate borrowers using quantitative and qualitative factors

- **Stress Testing**
  - Understand the effect of changing market conditions on CRE portfolios

- **Satisfy Regulatory Demands**
  - Comply with regulatory requirements and determine loan loss provisions
Moody’s Analytics

The Moody’s Analytics CRE Suite:

» **CMM® (Commercial Mortgage Metrics)** is the leading analytical model for assessing risk in commercial mortgage loan portfolios. Using CMM analytics, customers can calculate PDs and LGDs, deploy capital according to risk policies, price new loans and have an early warning system for potential defaulters. CMM analytics allows you to analyze how different market factors impact debt service coverage and loan-to-value ratios, including forecasted vacancy and capitalization rates as well as other market data.

» **RiskAnalyst™** allows firms to gain a comprehensive and consistent view of counterparty risk by combining CRE financial spreading, credit analysis and data storage in one platform.

» **RiskOrigins™** is a loan origination platform that, in addition to spreading, credit analysis and data storage, includes built-in CRE workflows and limits management capabilities to enforce risk practices more efficiently. With pre-deal limit checking, lenders are able to determine whether new loans fit pre-defined limits policies at the time of origination and highlight others that may be problematic - resulting in opportunities to price loans more accurately.

   - **CRE Data Templates** allow users to collect historical and pro-forma property information in a consistent manner when used with RiskOrigins and RiskAnalyst. Our templates include: Income Producing Real Estate (IPRE), Land Development and Home Builder. These data templates allow users to centrally analyze property-level information such as net operating statements, rent and vacancy rates, loan exposure details, sensitivity analysis and produce an internal risk rating for your properties.

   - **CRE Scorecards**, available with RiskOrigins and RiskAnalyst, provide a consistent standardized approach to rating IPRE properties using a dual-risk rating approach with PD and LGD metrics and qualitative factors customized for permanent and construction lending.

   - **Scenario Analyzer™** allows users to understand the impact of changing market conditions, such as decreases in GDP and unemployment, on portfolios of CRE loans, individual loans and internal rating models. Stress testing can be used to manage risk more effectively, make optimal lending decisions based on a portfolio’s risk-return given a particular stressed scenario and ensure that your firm has adequate capital allocations to withstand an extreme event.

The Difference: An Enterprise-Class Suite of Software, Scenarios and Data for Managing Commercial Real Estate Risk

Our CRE suite is the only enterprise-class solution on the market to fully integrate CRE default and recovery models with a loan origination and spreading platform, along with stress testing capabilities. CMM analytics leverages macroeconomic scenarios developed by teams of Ph.D. economists in Moody’s Analytics Economic & Consumer Credit Analytics group, led by Chief Economist, Mark Zandi, and real estate forecasts provided by CBRE Economic Advisors.

Centrally Analyze Property-Level Information to Produce Risk Ratings for Your Properties

Net Operating Income (NOI) Statement

Once you enter property data into one of our CRE data templates in a standardized manner, you can easily analyze property data and look for key trends and metrics, resulting in better decisions.

The “cone” graphic produced by CMM analytics generates confidence intervals around a base-case forecast of office income in a given metropolitan statistical area (MSA).
Best-in-Class Commercial Real Estate Default Analytics and Modeling

With CMM analytics, and CRE scorecards for RiskOrigins and RiskAnalyst, risk managers and investors can quickly calculate PD and LGD measures for their CRE loan portfolio and convert these into a customized internal rating for their organization. Our CRE suite allows users to consistently analyze how different market factors such as vacancy, rents and cap rates impact debt-service-coverage and loan-to-value ratios for each loan.

**PDs, LGDs and Expected Loss Measures**
CMM analytics, which can be integrated with RiskAnalysis and RiskOrigins, uses loan and property level information in combination with market data, to calculate PD and LGD measures. Here you see these measures over a ten year holding period, for a given property.

**CRE Scorecards**
Our CRE scorecards combine quantitative inputs, including PDs and LGDs from CMM analytics, along with qualitative factors, to analyze IPRE properties. In this example we used CMM analytics, integrated with our IPRE template, to analyze a fictitious property called Down South Office Tower.

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**Related Moody’s Analytics Products**

**RiskFrontier™**: Provides deep insights into the correlations between CRE loans and entire portfolios; RiskFrontier can use the PD and LGD outputs from CMM as inputs to its model.

**Economic & Consumer Credit Analytics**: Provides an extensive offering of economic, financial and demographic data, research and forecasts of global, national and local economies by leveraging a global team of over 70 economists/credit analysts.

**Research & Ratings**: Gain access to all issuer and industry research including in-depth reports, credit opinions, analysis, rating methodologies and topical research.

**Professional Services**: Using a wealth of data resources, we develop models and scorecards tailored to your specific types of obligors and transactions. We then embed these scorecards and workflows into your loan origination platform, allowing you to ensure your risk policies are followed. Our training team also offers training specific to our CRE products and the CRE industry.
Moody's Analytics Delivers Comprehensive Enterprise Risk Solutions

Moody’s Analytics enterprise risk management goes beyond credit, market and operational risk and delivers a solution for the entire risk life cycle, from measuring and pricing for risk in loan origination to portfolio and regulatory risk management and reporting, to managing balance sheet and liquidity risk. Our solution allows organizations to tie all credit exposures to an obligor, as well as to the entire portfolio, providing a consistent view of risk from origination to regulatory calculation and reporting to portfolio analysis.

About Moody’s Analytics

Moody's Analytics helps capital markets and risk management professionals worldwide respond to an evolving marketplace with confidence. The company offers unique tools and best practices for measuring and managing risk through expertise and experience in credit analysis, economic research and financial risk management. By providing leading-edge software, advisory services, and research, including the proprietary analysis of Moody's Investors Service, Moody's Analytics integrates and customizes its offerings to address specific business challenges.

We encourage you to try our CRE solutions 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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