TreppDefault Model™

The Trepp Default Model[™] (Trepp DM) is a web-based platform that enables banks to forecast commercial real estate loan Probability of Default (PD), Loss Given Default (LGD), Expected Loss (EL), and Current Expected Credit Losses (CECL) at the loan and portfolio levels. Bank clients trust Trepp DM as part of a robust Commercial Real Estate risk management process which includes meeting specific stress testing mandates like Dodd-Frank (D-FAST), Comprehensive Capital Analysis and Review (CCAR), Current Expected Credit Loss (CECL), and CRE Concentration Stress Testing. Trepp DM provides transparent and reliable results – all on a secure, hosted environment that is cost-effective, easily implemented, and efficient.

Experience Matters

The development of Trepp DM is built on our firm's experience and established reputation in dealing with large, complex data sets and delivering institutional-grade products to financial institutions. Since 2012, Trepp has helped banks build their own PD and LGD models for CCAR, DFAST and credit scorecard requirements. With that experience, Trepp DM was designed to work using the



precise specifications laid out by regulators, namely the Federal Reserve Bank, Office of Comptroller of the Currency, and the Federal Deposit Insurance Corporation. Along these lines, Trepp DM incorporates macro-economic variables – or market drivers, and loan characteristics at origination and over time to measure potential exposure for both regulator and custom bank scenarios. Building on top of that loan performance and econometric hybrid framework, Trepp DM also provides CECL-compliant reserve calculations at the loan and portfolio level.

Benefits

BETTER RESULTS: Trepp DM is built with the ability to customize multiple scenarios and make them more relevant to banks, which delivers a higher confidence in loan-loss projections.

TRANSPARENCY: Comprehensive documentation, third-party validation, and back testing eliminate the challenges of competitors' "black box" approach frowned upon by regulators meaning that Trepp DM offers results that are reasonable and defensible.

EFFICIENCY: PD, LGD, EL, and CECL ALLL results are calculated in a secure, web-based platform enabling the flexibility to quickly run and save large portfolios of loans or simply assess one loan at a time.

EASE-OF-USE: Clients can upload and run loan-level analysis from day one with an intuitive, accessible interface.

Use Cases

CHALLENGE	FEATURE	BENEFIT
CRE Concentration Stress Testing	 Custom macro scenarios 5-year forecast period Granular loan and portfolio results 	 Save on overhead (no need for consultant-built models or large data purchases and in-house modeling teams.) Jumpstart the process of improving CRE risk management and stress testing
DFAST/CCAR Stress Testing	 Regulator scenarios 9, 13-quarter forecast periods Loan Growth engine to account for future origination 	 Produce DFAST results for CRE exposure Use DM as a primary, benchmark or challenger model
ALLL Reserving	 Custom macro scenarios and value/NOI vectors Various forecast periods to account for different loss emergence period assumptions 	Create a more robust ALLL modeling process for CRE lending assets
Life of Loan CECL Forecasting	 Life of loan forecast period DCF CECL compliant ALLL calculator Pre-canned vintage and risk cohort portfolio results 	Generate quarterly, CECL compliant reserves for the CRE book of business
Risk Rating/Scorecard Development	 Custom forecast period and scenarios Quantitative, econometric model driven PD/LGD output 	 Instill quantitative rigor in the CRE rating/grading system

Model Drivers

Trepp DM is a product of feedback directly from regulators and banks regarding a host of variable inputs that comprise a proven set of model drivers:

LOAN-LEVEL DRIVERS

- Loan-to-Value Ratio
- Debt Service Coverage Ratio
- Loan Rate
- Property Type
- Location

MARKET-LEVEL DRIVERS

- Bank Regulator Scenarios
 - Unemployment Rate
 - Interest Rates
 - US Commercial Real Estate Price Index
- Trepp-Produced Drivers

ABOUT TREPP

Trepp, LLC, founded in 1979, is a leading provider of data, analytics, and technology solutions to the global securities and investment management industries. Trepp specifically serves three key sectors: structured finance, commercial real estate, and banking to help market participants meet their objectives for surveillance, credit risk management, and investment performance. Trusted by the industry for the accuracy of its proprietary data, Trepp provides clients sophisticated, comprehensive models and analytics. Trepp is wholly owned by dmg Information, the business information division of Daily Mail and General Trust (DMGT).

For more information, visit www.Trepp.com or email info@trepp.com.