

Looking to Quantify Prepayment and Credit Risk to Better Understand and Value your Portfolio?

LoanDynamics (LDM) is the solution you need. Our behavioral model helps you manage interest rate credit risks in single family, multifamily and auto loans by forecasting repayment, delinquency, default and loss probabilities. LDM:

- Helps generate cash-flow projections to forecast portfolio outcomes based on changing economic and market conditions such as home prices, interest rates and unemployment
- Provides crucial insights into asset-liability management, particularly the impact on income which is highly sensitive to interest rate changes
- Supports various use cases: valuations on loans, MBS and ABS; stress testing; mortgage servicing rights analysis; Credit Risk Transfer (CRT) analysis; reserving (e.g. ALLL/CECL) and mortgage insurance (MI) needs
- Informs and helps develop hedging strategies

LDM is the flagship product of Andrew Davidson & Co. and an industry standard for evaluating and quantifying behavioral risk.

LoanDynamics (LDM) covers various types of collateral to satisfy client needs.
Our family of models includes:

Single Family

Agency LDM

Produces prepayment and default vectors through loan repurchase

Best for: Agency pools, TBAs and CMOs

Agency LDM+

Produces prepayment, default and severity vectors for the life of the loan

Best for: Portfolios of agency-conforming loans, credit risk transfer deals

Non-Agency LDM

Produces prepayment, default and severity vectors for the life of the loan

Best for: Portfolios of non-agency loans and non-agency securities

Multifamily

Multifamily LDM

Produces prepayment and default vectors for the life of the loan

Best for: Portfolios of multifamily loans and multifamily securities

Autos

Auto LDM

Projects life of loan delinquency migration until payoff, prepayment, or default. Projects loss given default.

Best for: auto loan portfolios or securities

Features and Capabilities

- Prepayments and defaults are forecasted within a single framework
- Single family LDM options include transition-based frameworks for handling loans or pools in any delinquency status
- Single family LDM options include a dynamic primary-secondary spread rate model
- Auto LDM models severity in two stages: 1) probability of repossession; 2) severity for repossessions and non-repossessions
- Users can “tune” the model to better fit their portfolio

Additional Benefits

- Widespread adoption and internal monitoring provide constant feedback ensuring that LDM maintains its relevance
- Serves as an effective challenge to internal models
- Comprehensive documentation provides transparency into the model’s approach
- User guides and publications discuss timely updates, technology developments and related market issues
- Superior client service is available to support product use and functionality

LDM is used by:

- Banks and Credit Unions
- Broker-Dealers
- Insurance Companies
- Investment Managers
- Mortgage Bankers and Servicers
- Regulators and Guarantors

Access and Delivery

LoanDynamics is available through various industry leading third-party systems (**Vendors**) and easily integrates into a user’s proprietary platform.



Andrew Davidson & Co. is a leading provider of risk intelligence solutions. Founded in 1992 by **Andrew Davidson**, we are internationally recognized for our leadership in the development of financial research and analytics for loans and MBS products, valuation and hedging strategies, housing policy and GSE reform, and credit-risk transfer transactions. With nearly 30 years of risk management experience and a deep base of market knowledge, our team of experts turn data into meaningful insights. Based on LDM, additional solutions to consider include:

RiskValDynamics is our advanced valuation system for structured securities, including both agency and non-agency MBS.

LoanKinetics is our multi-functional whole loan application that evaluates legacy and newly originated residential mortgage loans and is the first offering on our modular Kinetics platform.

RiskProfiler is our most comprehensive solution for valuing mortgage-backed securities (MBS), asset-backed securities (ABS) and their derivatives and instruments used in hedging these assets.

Leadership in Reliable Risk Intelligence