High-quality mortgage risk analytics are often integral to managing the risk of your fixed income portfolio. However, building and maintaining a mortgage prepayment model typically requires a significant investment in data and expertise, making it difficult to undertake internally. MSCI’s research-based Agency MBS Prepayment Model offers an innovative modeling methodology with a high level of transparency and granularity. Integration with our multi-asset class enterprise risk framework enables us to provide a more comprehensive view of risk at a portfolio and single security level.

**Gain deeper portfolio insight**

Identify key drivers of performance across multiple mortgage collateral segments using a model that leverages granular inputs to deliver a greater level of insight.

- Our modeling framework offers consistent and precise single security valuations and risk measures, in line with models traditionally offered by dealers
- Compare climate VaR across asset classes

**Manage risk more effectively**

Create greater alignment between risk and portfolio management teams with high-quality risk measures that are consistent with front office expectations.

- Gain transparency into short and long-term prepayment risk drivers enabling you to overlay your own macro risk views
- Our model identifies and models regime shifts, enabling you to better analyze tail risk

**Broad analytical and instrument coverage**

**Risk Statistics**

- Yield, Weighted Average Life (WAL), Zero Volatility Spread
- Projected Conditional Prepayment Rates (CPRs) and Cashflows
- Option Adjusted Spread, Duration/Convexity (OAS, OAD, OAC), Option Cost
- Key Rate Durations, OAS Spread Duration, Mortgage Spread Duration, Prepayment Durations

**Scenario Analysis**

- Interest Rates Instantaneous Shocks
- Prepayment Shock Scenarios
- Horizon Analysis (Future Interest Rates Shocks)

**Instrument and Segment Coverage**

15yr/20yr/30yr/40yr securities, To Be Announced (TBAs), Generic MBS, Specified Pools, CMO (Collateralized Mortgage Obligation) across:

- Mortgage-Backed Securities (MBS) backed by Fixed-Rate and Adjustable-Rate Mortgages
- Fannie Mae
- Freddie Mac
- Ginnie Mae
**Integrated into MSCI’s multi-asset class analytics**

In today's cost-conscious environment, investment managers often can no longer afford having multiple niche platforms across different asset classes to help them manage their multi-asset class portfolios. MSCI’s Agency MBS Prepayment model is integrated into our unified, industry-leading analytics framework, delivering a holistic view of risk across fixed income, commodities, equities and FX. We offer:

- Multiple Value-at-Risk (VaR) simulation methodologies
- Robust stress testing
- Sensitivity analysis
- Flexible instrument pricing models

**MSCI fixed income analytics**

MSCI's Agency MBS Prepayment model is part of our extensive suite of fixed income portfolio analytics. Backed by expert research and rigorously reviewed data, our solutions help clients address four critical areas of fixed income portfolio risk and performance management.
Easily access and integrate fixed income content

Integrate MSCI content into your workflows without disrupting your existing investment processes.

Interactive applications

MSCI applications, including BarraOne, Single Security Analyzer and Excel plug-in, enable portfolio managers to receive fixed income analytics directly in the Order Management System (OMS).

Examples of strategic partnerships:

Large-scale batch reporting

MSCI managed production of standardized and custom reports in PDF, Excel, CSV, XML and other formats for thousands of portfolios.

APIs

Direct, intraday access to MSCI’s data and calculation engines via modern API’s that maximize speed of delivery.

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit www.msci.com.