Agency Fixed Rate Prepayment Model

Manage the risk of complex mortgage instruments more effectively with MSCI's integrated fixed income risk analytics.

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 Fixed Rate Prepayment Model offers an innovative modeling methodology with a high level of transparency and granularity. Integrated into 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.

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
30yr and 15yr securities, To Be Announced (TBAs), Generic MBS, Specified Pools, CMO (Collateralized Mortgage Obligation) across:
- Mortgage Backed Securities (MBS) backed by Fixed Rate Agency Collaterals
- 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 portfolio. MSCI’s Agency Fixed Rate 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

Flexible delivery options

- RiskManager, our multi-asset class risk management platform
- Web-based Application Programming Interfaces (APIs)
- Managed services including optional operational support and data management from MSCI

MSCI fixed income analytics

MSCI’s Agency Fixed Rate 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.

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Integrated into MSCI’s multi-asset class analytics

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 45 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.

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