

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:

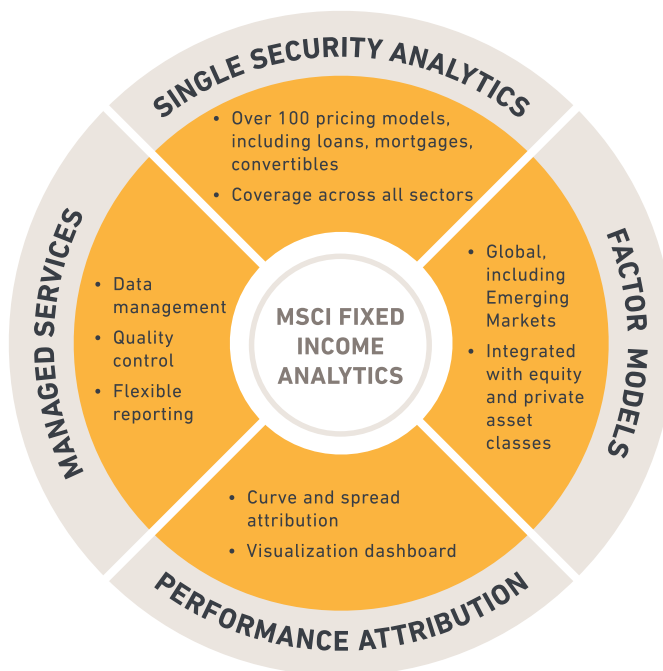
- Multiple Value-at-Risk (VaR) simulation methodologies
- Robust stress testing
- Sensitivity analysis
- Flexible instrument pricing models

FLEXIBLE DELIVERY OPTIONS

- MSCI Applications
- Web-based Application Programming Interfaces (APIs)
- Managed Services

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.



ABOUT MSCI

For more than 40 years, MSCI's research-based indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research. Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research. MSCI serves 99 of the top 100 largest money managers, according to the most recent P&I ranking. For more information, visit us at www.msci.com.

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