

SAS Kamakura Risk Information Services (KRIS)



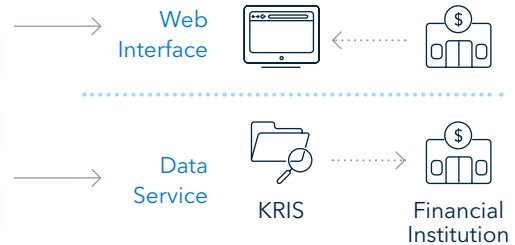
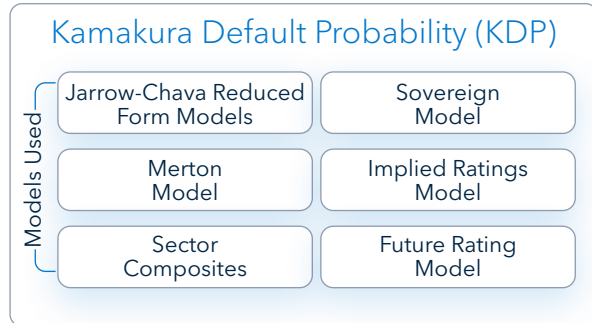
Unparalleled Accuracy in Default Probability

Credit risk has moved to the forefront of financial risk practice, driven largely by the 2008 financial crisis and recent bank failures. This is due to wider credit problems concerning securities financing, counterparty credit risk, long term settlements, and a lack of analyzing market and credit risk together rather than in silos.

KRIS default probabilities, Corporate Credit models developed by Prof. Robert Jarrow, and other outputs offer users unique content and capabilities found nowhere else.

The service includes models for Probability of Default (KDP), Implied Spread, Implied and Future Ratings along with bond analytics and credit portfolio management capabilities. Additional optional models related Sovereign Debt, US Banks and Non-Public Firms, CLO's are available.

- Financial Statements 
- Economic Data 
- Market Data 
- 20+ Years of Research 

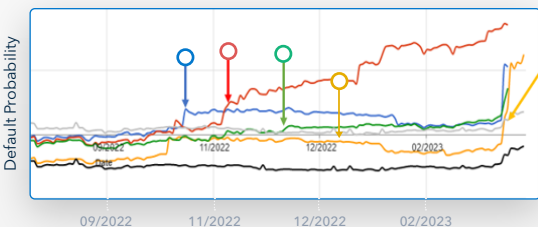






Used by one of the large US regulators, hedge funds, asset-managers, and banks globally.



- Full term structures of default** on 41,000 public companies in 77 countries.
- Daily updated default probabilities** based on available data.
- Disclosure of default probabilities** model factor data in coefficients.
- Future implied ratings** offers term structures of likelihood of futures ratings, including probabilities of upgrade and downgrade.
- Daily US bond trades** analyzed and a ratio of bond spreads to issuer default probability calculated daily.
- Implied ratings distributions** statistically derived from actual rating history.

Early Warning of the recent crisis.



Institution Name	1-yr KDP over 90th Percentile	1-yr KDP > 5-yr KDP
 SIVB: Silicon Valley Bank Financial Group	October 21, 2022	October 21, 2022
 SI: Silvergate Capital Corp.	November 7, 2022	January 5, 2023
 FRC: First Republic Bank	March 9, 2023	March 9, 2023
 SBNY: Signature Bank	December 6, 2022	March 10, 2023

Lessons learned from an emergency.



Credit Ratings are a Weak Default Probability Measure!

Use multiple models for default probability and an external, industry-recognized source to effectively challenge.



Actively Monitor Counterparty Credit Risk!

Utilize with our forward-looking bond spreads to enable your teams to make better investment and risk decisions.



Integrate and Use!

Improve your intra-day counterparty credit decision making by leveraging PDs with existing risk decision structures.

For more information on SAS Kamakura Risk Information Services (KRIS), please visit:

Risk Management Software, Enterprise Risk Management | SAS