AXIOMA
Analytics by Qontigo

Axioma Risk™

Enterprise portfolio risk management system

AXIOMA RISK is a flexible system for multi-asset class risk management, offering analytics and data in a unified platform.

In the system, a suite of analytics tailored to meet portfolio and asset-specific risk measurement needs is coupled with integrated market data and terms and conditions data for over 5 million active and 10 million inactive fixed income, derivative and equity securities across all major currencies and liquid emerging markets.

With flexible integration and API capabilities, Axioma Risk is designed to support the unique requirements of each investment firm.
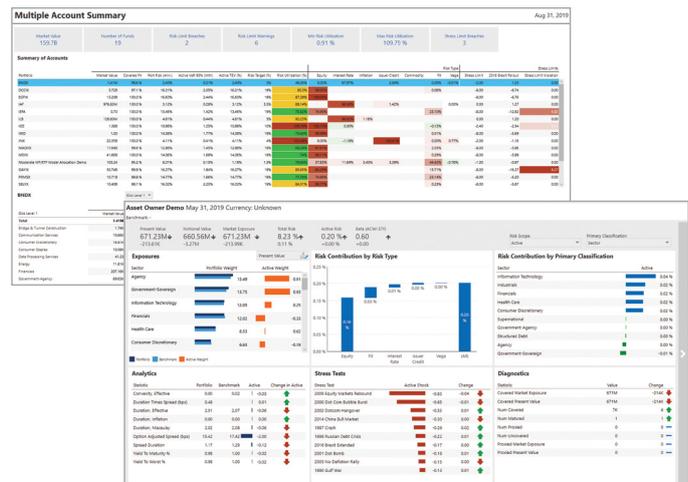
Why use Axioma Risk?

Axioma Risk delivers consistent measures of risk, including decomposition through fixed income and fundamental equity factor models. Users can evaluate risk measures via a top-down underlying factor model, or a bottom-up full revaluation approach using a granular risk model, with either linear approximation or simulation-based full-revaluation models.

ADVANCED SYSTEMS	•	Delivers intuitive and understandable measures for portfolios with different underlying strategies, asset classes and investment horizons.
SINGLE PLATFORM	•	Allows institutions to replace multiple systems with a single analytics platform accessible and relevant to both portfolio management and risk management functions.
SOPHISTICATED FRAMEWORK	•	Offers sophisticated stress-testing framework, allowing you to walk through a historical period (or multiple periods) one day at a time.
	•	Captures the observed path-dependent behavior, while also offering standard instantaneous, model parameter and correlated stress tests.
SIMPLIFIED WORKFLOWS	•	Backtest VaR models, to monitor trends in risk measures, and to identify periods of stress for future scenario analysis through its included historical results storage.
	•	The system's storage of position details and risk results, coupled with aggregation at scale, also make the system interactive and responsive by eliminating redundant revaluations.
	•	Client-provided position details can be managed through Axioma Risk's REST API or SFTP, simplifying its incorporation into your existing workflow.

Asset coverage and market data

✓ Asset coverage

Pricing models and data enrichment covers most asset classes, including:

- Commodity and derivatives
- Credit and derivatives
- Currency and derivatives
- Equity and derivatives
- Fixed income and derivatives
- Structured debt
- Developed and emerging markets
- Support for fund-of-fund structures

✓ Market data

Provides much of the market data necessary for risk analyses, including but not limited to:

- Axioma Equity Factor Risk Models
- Axioma Fixed Income Spread Curves
- Axioma Factor-based Fixed Income Risk Model
- Axioma Granular Fixed Income Risk Model
- Axioma Commodity Model
- Commodity CMF curves
- Equity price data

✓ Terms and conditions data

- Commodities
- Fixed income
- Credit
- Futures
- Equities
- Options

✓ Data enrichment

- Country
- Sector
- Composite rating
- Consistent issuer information across securities

Risk measures, application and data integration

RISK MEASURES

- Factor sensitivities
- Fixed income risk measures
- Portfolio aggregation by risk factor
- Greek sensitivities
- Beta
- Fixed-income valuation measures
- Asset aging within scenarios
- Multi-currency support
- Multi-horizon support
- Statistical measures
- VaR and Tracking Error
- Flexible risk resolution

STRESS TESTING

- Scenario analysis via market factor shocks
- Model parameter shocks
- Historical event simulations
- Instantaneous or horizon-adjusted "walk-throughs"
- Independent or correlated factor .movements allow forward-looking stresses to be defined

DATA INTEGRATION

- Standards-based API
- Rapid integration into client workflow
- Full support to import assets using common identifiers or OTC instruments
- Historical results storage

MODEL SUPPORT

- Factor model risk simulations
- Market factor risk simulations
- Linear risk modeling
- Simulation-based risk modeling of non-linear assets
- Multiple distribution assumptions available (for example, allowing fat tails to be created)
- Independent settings for correlation and volatility estimation

APPLICATION

- Web-based interface
- Interactive tools to manage positions and allocations, define reports, and test overlays
- Import and export data directly from and to Excel
- Export dashboard results in multiple formats.
- Multi-user environment

REPORTING

- Absolute and relative risk reporting
- Business intelligence engine for dashboard definition
- SSRS tools for customized report generation
- Multilevel hierarchical risk reporting
- Customizable risk decomposition

"With Axioma Risk, we now have one common system, with everyone talking about risk using the same numbers and looking at those numbers in the same system. And that has really moved us forward, not only in terms of knowledge, but in terms of cooperation within the organization itself."

RIKARD ANDERSSON, SKANDINAVISKA ENSKILDA BANKEN AB (SEB)