Barra Analytics on FactSet

Barra's market-leading equity risk, performance attribution, and optimization tools delivered via FactSet's integrated portfolio management application.
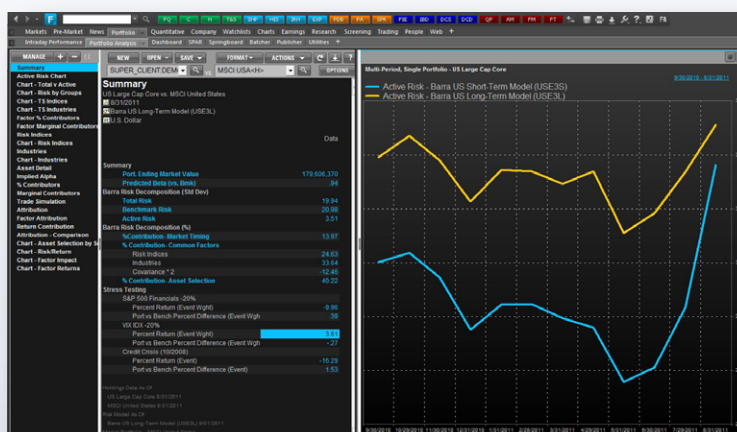
Barra's market-leading equity risk models, analytics, and optimizer are backed by thorough research, quality data, and robust methodologies. Designed to maximize portfolio intuition and forecast accuracy, these tools are fully integrated into the FactSet platform in the portfolio analytics suite.

Without any additional investment in technology infrastructure, FactSet clients can access Barra analytics to:

» Run screens and build alpha signals using the Barra asset characteristics

» Construct portfolios with Barra equity risk models and Barra Open Optimizer

» View risk and performance attribution analysis

» Build and automate consolidated reports

» Perform pre-trade analysis to verify the new risk profile if trades are executed

» Look through composite assets such as ETFs to measure risk and sector/industry weightings

Key Benefits

» **Insight –** Understand the contributing factors to past returns and current risk exposures.

» **Confidence –** Rely on sophisticated factor models and an experienced global data processing team for high-quality, timely, and relevant analytics.

» **Operational Efficiency –** Leverage the existing relationship with FactSet to access Barra analytics.

» **Optimization –** Utilize the latest optimization enhancements from Barra.

» **Consolidated Reporting –** Add Barra analytics to reports with fundamental data and other content available on FactSet.

» **Premier Support –** Gain access to highly trained support teams from both MSCI and FactSet.

Note: Separate licensing is required to use multiple systems from Barra and FactSet.

» **Risk –** Standard risk-forecasting analytics include portfolio, factor, and asset-level measures in both absolute and benchmark relative terms. Users can access several key numbers, including tracking error, risk decomposition into common and stock specific factors, active exposures, and contributions to risk. The Barra models are also available for use with other FactSet analytics.

» **Performance Attribution –** Attributing returns to fundamental factors on a daily basis provides both a greater understanding of how and where a portfolio manager adds value and a more consistent and realistic analysis of the portfolio.

» **Optimization –** Incorporating updated functionality from MSCI, the Barra Open Optimizer allows customize objective functions, paring constraints, risk target optimization, constraint hierarchy, leverage constraints, conditional rebalance, other advanced features.[1]

» **Asset Characteristics –** Clients can screen and analyze securities based on asset-specific characteristics such as total risk, predicted beta, exposures to specific factors, estimated yield, and more. This functionality can be used for idea generation, relative value analysis, or as the basis for alpha signals.

Available Barra Models

FactSet clients can access Single Country models, Global models including the Barra Integrated Model, and regional models for Europe, Asia-Pacific, and the emerging markets.

Countries in Bold are covered by their own dedicated models in addition to Barra global/region and integrated models. All other countries are covered by global/regional or integrated models only.

MSCI Index Countries					Non-MSCI Index Countries

Developed Markets

Americas	Europe & Middle East	Pacific
Canada	Austria	**Australia**
United States	Belgium	**Hong Kong**
	Denmark	**Japan**
	Finland	New Zealand
	France	**Singapore**
	Germany	
	Ireland	
	Israel	
	Italy	
	Netherlands	
	Norway	
	Portugal	
	Spain	
	Sweden	
	Switzerland	
	United Kingdom	

Emerging Markets

Americas	Europe, Middle East & Africa	Asia
Brazil	Czech Republic	**China**
Chile	Egypt	**India**
Colombia	Greece	**Indonesia**
Mexico	Hungary	**Korea**
Peru	Poland	Malaysia
	Russia	Philippines
	South Africa	**Taiwan**
	Turkey	Thailand

Frontier Markets

Americas	Europe & CIS	Africa	Middle East	Asia
Argentina	Bosnia Herzegovina	Botswana	Bahrain	Bangladesh
Jamaica	Bulgaria	Ghana	Jordan	Pakistan
Trinidad & Tobago	Croatia	Kenya	Kuwait	Sri Lanka
	Estonia	Mauritius	Lebanon	Vietnam
	Lithuania	Morocco	Oman	
	Kazakhstan	Nigeria	Palestine	
	Romania	Tunisia	Qatar	
	Serbia		Saudi Arabia	
	Slovenia		United Arab Emirates	
	Ukraine			

Global
Cote d'Ivoire
Cyprus
Iceland
Latvia
Macedonia
Malta
Montenegro
Namibia
Slovakia
Venezuela
Zambia

The Barra Models incorporate the latest advances in research methodology:

» New factors based on Systematic Equity Strategies to improve accuracy and explanatory power especially during periods of economic crisis.

» Optimization Bias Adjustment reduces forecasting bias in optimized portfolios.

» Volatility Regime Adjustment calibrates factor volatilities to current levels and results in a faster response to market trends.

» Robust specific risk models incorporate Volatility Regime Adjustment and Bayesian shrinkage techniques for greater forecast accuracy.

The latest models are available with:

» Full daily updates designed to improve risk monitoring, exposure control, intra-month portfolio rebalancing, scenario/stress testing, and backtesting.

» Deep daily history for extensive backtesting.

» Multiple investment horizons.

Models focusing on specific investment styles such as the Barra US Small Cap Equity Model and Barra US Sector Models[2] are also available.

_____

[1] Some features pending release.

[2] Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Telecommunication Services and Utilities Sectors are covered by Bara US Sector Models integrated and individual versions.

msci.com | clientservice@msci.com

About MSCI

MSCI Inc. is a leading provider of investment decision support tools to investors globally, including asset managers, banks, hedge funds and pension funds. MSCI products and services include indexes, portfolio risk and performance analytics, and ESG data and research.

The company's flagship product offerings are: the MSCI indexes with over USD 9 trillion estimated to be benchmarked to them on a worldwide basis[1]; Barra multi-asset class factor models, portfolio risk and performance analytics; RiskMetrics multi-asset class market and credit risk analytics; IPD real estate information, indexes and analytics; MSCI ESG (environmental, social and governance) Research screening, analysis and ratings; and FEA valuation models and risk management software for the energy and commodities markets. MSCI is headquartered in New York, with research and commercial offices around the world.