

MSCI Europe Equity Factor Models

The next generation of the Europe Equity Factor Model suite builds on a half-century of experience constructing equity indexes and risk models for equity investors. Deep research, comprehensive data and computational power convene to solve modern investing's most pressing challenges. The model introduces factors like Crowding, Machine learning and Sustainability - redefining the way models are constructed and delivered in addition to modular factor structure and advanced risk-forecasting methodologies.



New investment insights

- Assess the 'bubbliness' or level of crowding of stocks and portfolios with stock crowding factor
- Understand and capture non-linear relationships between factor exposures and returns using machine learning
- Help your portfolios weather changing market regimes over multiple cycles with the help of adaptive factor covariance
- Identify clusters of highly similar companies that may lead to "cluster risk" in your portfolio
- Expand your investment opportunity with new models evaluating pre-merger Special Purpose Acquisition Corporations (SPACs)
- Measure the exposures of your portfolio to sustainability and understand its contribution to portfolio risk and return
- Understand the carbon intensity of your portfolio to meet your decarbonization or net zero commitments
- Enhancements to existing factors including Residual Volatility, Growth and Short Interest to improve handling of IPOs, interpretability, coverage and/or stability
- Addition of an enhanced Short Interest factor that is not orthogonalized to other factors

A factor structure aligned to multiple investment horizons

Designed for	Long-Term Models	Trading Models
	<ul style="list-style-type: none"> • Active and passive asset managers • Asset owners • Sell side – Banks and Market makers • Buy Side- Hedge Funds • Fundamental and quantitative managers 	<ul style="list-style-type: none"> • Equity hedge fund managers • Quantitative asset managers • Algorithmic traders • Sell-side traders • Risk managers
Focus	<ul style="list-style-type: none"> • Designed with a focus on portfolio construction • Decompose complex portfolios into intuitive risk factors; provides managers, investors and regulators a clearer understanding of risk exposures and risk-adjusted performance • Available in Stable and Responsive variants 	<ul style="list-style-type: none"> • Most responsive model in the family with a daily forecast horizon, enabling you to swiftly adapt to market disruptions • Designed for analyzing risk in short term portfolios • Constructed for short-term trading, hedging, and daily risk monitoring

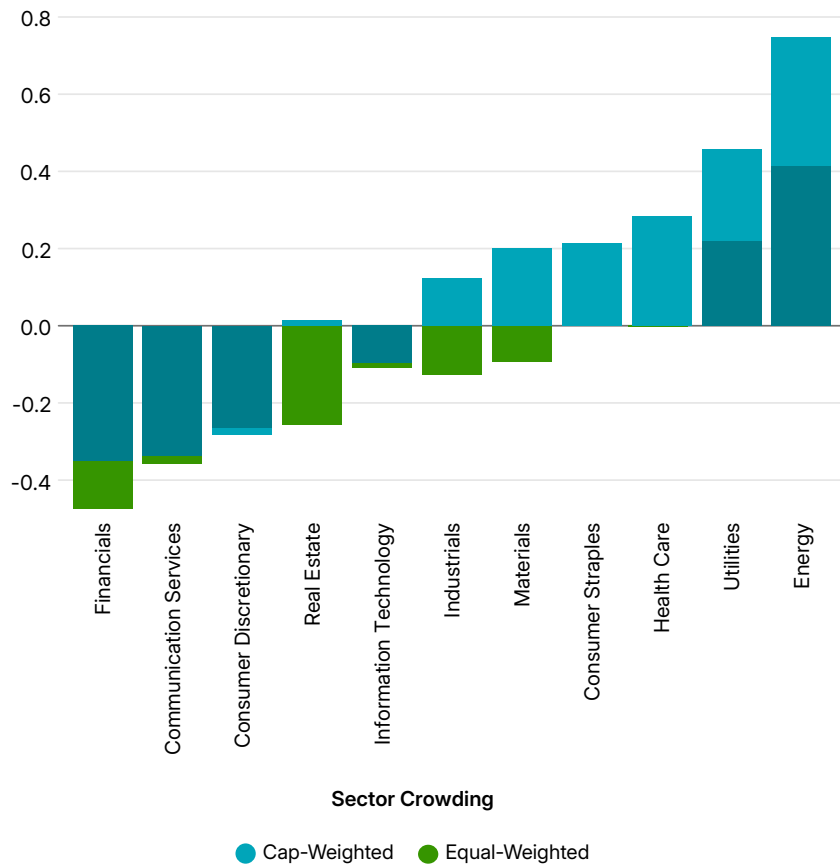
Elevate your investment process with our latest innovations

Quantify the impact of carbon emissions on portfolio returns while adjusting for other effects

Climate Index	Total Active (%)	Industries (%)	Styles (%)	Specific (%)	Carbon(%)
MSCI USA Climate Paris Aligned	0.2	-0.2	-1.4	1.7	-0.2
MSCI USA Low Carbon Target	1.5	-0.4	-0.1	1.8	-0.1

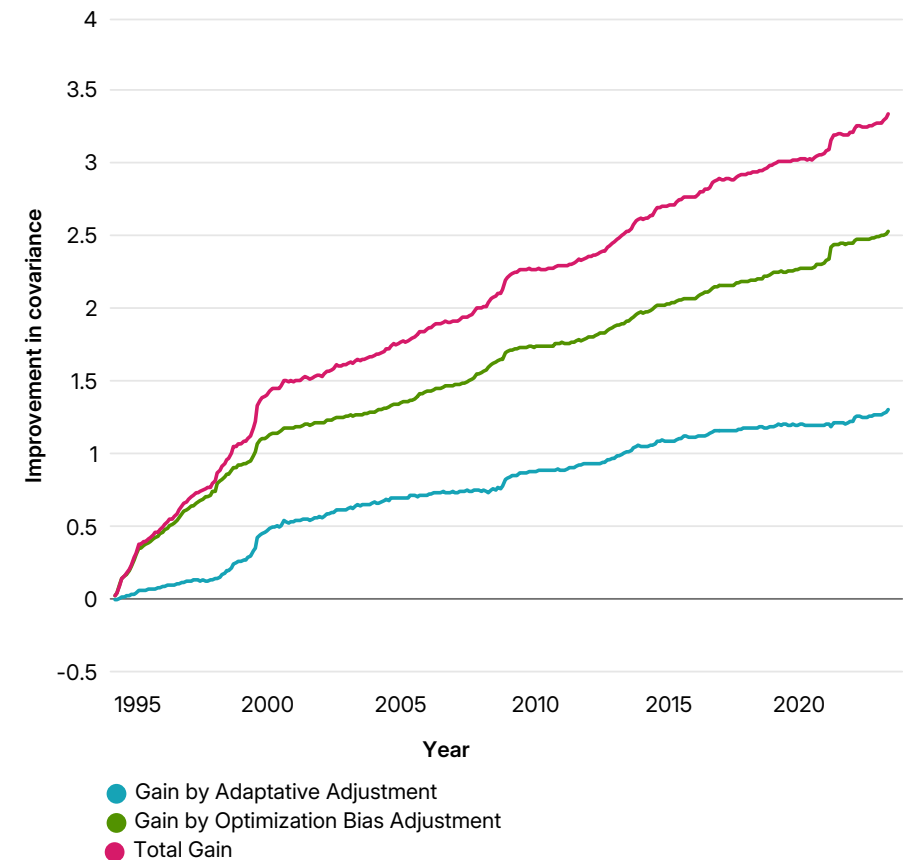
Sample performance attribution of active returns (May 2020 – March 2022)

Understand how bubbly are your holdings, portfolio and market segments









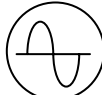




US sectors as of May 31, 2022

Improve the forecast accuracy of factor covariance



Europe equity content set - What does it cover?

Coverage	26 Style Factors	19,000+ securities	29 industry factors based on GICS®		
Asset Classes	Depository receipts Cross-listed securities Stocks Equity index futures ETFs SPACs				
Factors	<div></div> <div>VOLATILITY</div>	<div></div> <div>YIELD</div>	<div></div> <div>QUALITY</div>	<div></div> <div>MOMENTUM</div>	<div></div> <div>VALUE</div>
	<div></div> <div>SIZE</div>	<div></div> <div>GROWTH</div>	<div></div> <div>LIQUIDITY</div>	<div></div> <div>NONLINEARITY</div>	<div></div> <div>SUSTAINABILITY</div>



Model distribution and access

Access MSCI's models on cloud via Snowflake, through MSCI applications including BarraOne, Barra Portfolio Manager, through direct data delivery (Models Direct), or through third-party vendor platforms.

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 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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