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# MSCI Portfolio and Risk Analytics in Charles River IMS

Investment managers, asset owners, insurers, and wealth managers can now access MSCI Portfolio and Risk Analytics from the Charles River Investment Management Solution (Charles River IMS). Charles River's portfolio management, risk and attribution capabilities integrated with MSCI factor models and analytics enable firms to generate timelier risk forecasts, more clearly attribute investment returns, and to bring differentiated investment products to market faster.

Leveraging Charles River's single data model and manager workbench, MSCI Analytics provides investment and risk professionals with a common language for identifying and communicating the sources of market, credit, liquidity, and counterparty risk across asset classes, including private assets.



## Investment Professional Benefits

- Single desktop user experience
- Robust portfolio construction and optimization capabilities tightly coupled with compliance
- Quickly see risk impact based on proposed and executed trades
- Seamless access to factor models and MSCI analytics across risk and attribution workflows



## Firm-wide Benefits

- Unlock operational efficiencies by leveraging a common data infrastructure across front, middle and back office
- Allow for a consistent view of risk and performance analytics across the enterprise
- Manage all funds, strategies and accounts on a single enterprise platform
- Facilitate collaboration across staff roles and business units

Charles River IMS clients gain access to MSCI's Barra equity, fixed income, and multi-asset class factor models as well as Barra Performance Attribution (factor-based, Fixed Income), the RiskMetrics suite of granular analytics and stress testing. Access to additional capabilities such as liquidity risk reporting from MSCI LiquidityMetrics is available and can be configured to meet specific needs.



**Over 300 MSCI Barra Equity Models\*** help fund managers construct, manage and analyse equity portfolios across developed, emerging and frontier markets through multiple investment time horizons. With MSCI's extensively researched and intuitive fundamental factors, fund managers can identify sources of global equity returns that are common across a broad set of securities and estimate their associated risks.



**MSCI Barra Fixed Income Factor Models** provide global fixed income asset and instrument coverage. The model incorporates Duration Times Spread (DTS) and basis factors as risk indicators. DTS informs investment managers of rapidly changing credit quality, allowing managers to quickly assess the risk and exposure of their investments. Basis factors such as cash versus CDS and on-the-run vs. off-the-run treasuries provide tools for managing trade risks.



**MSCI Multi-Asset Class (MAC) Factor Models** help firms construct and manage asset-class and factor-based allocation strategies by providing insights into key exposures across all asset classes. The MAC models' tiered structure enforces consistency across the investment process and helps simplify communication of exposures by providing:

**Detailed** exposures for portfolio managers

**Core** exposures for asset class managers

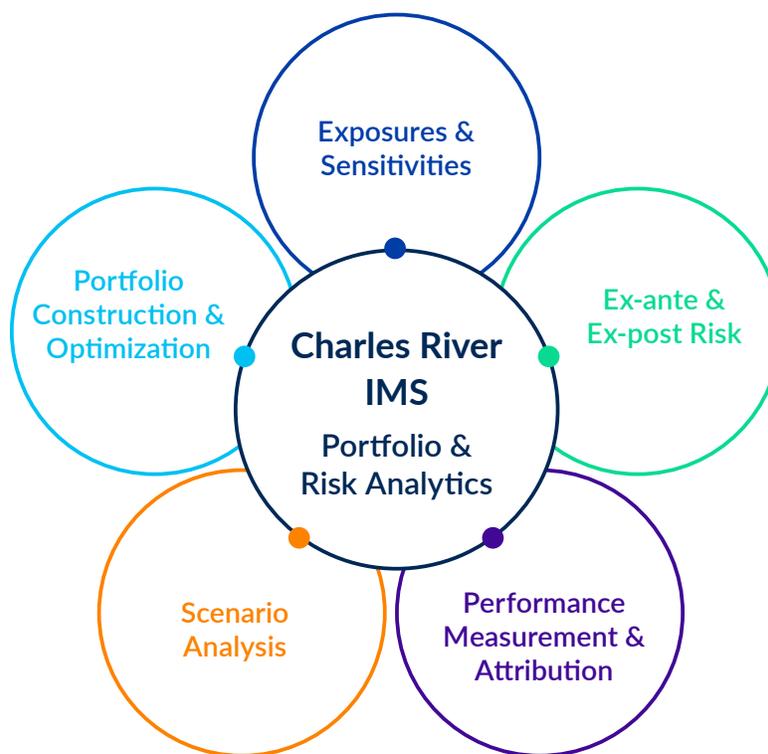
**Global** exposures for asset allocators



**MSCI Barra Attribution and Performance Analytics** extends Charles River PMAR with industry proven capabilities. Clients can analyse their entire hierarchy of portfolios to understand sources of return and risk side-by-side. MSCI also enables flexible and granular return decomposition aligned with a portfolio manager's investment strategy and required granularity.

\* As of January 2021

# MSCI's Portfolio and Risk Analytics in Charles River IMS



## MSCI Barra Risk Models

- 300+ Models Across Multiple Time Horizons\*
- Global and Local Equity Models
- Fixed Income
- Private Equity, Real Estate, Hedge Funds
- Multi-Asset Class



## MSCI LiquidityMetrics

- Regulatory Reporting
- Liquidity Risk Management



## Attribution

- Brinson and Factor
- Equity, Fixed Income, Multi-Asset Class



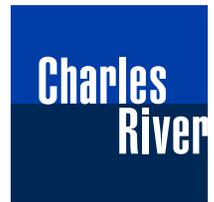
## RiskMetrics

- Single Security Analytics with Multiple Levels of Aggregation to Portfolios/ Funds, Attributes like Industry and Sector, and Custom Attributes like Trader and Business Units
- Exposures and Sensitivities
- Distributional Statistics (VaR, Volatility, Tracking Error)
- Stress Tests
- Granular Basis Risk

\* As of January 2021

## 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](http://www.msci.com).



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## Charles River Development, A State Street Company

Investment firms, asset owners, wealth managers, hedge funds and insurers in more than 30 countries rely on Charles River's front and middle office investment management platform to manage more than US\$30 Trillion in assets. Together with State Street's middle and back office capabilities, Charles River's cloud-deployed software technology forms the foundation of State Street Alpha<sup>SM</sup>. The Charles River Investment Management Solution (Charles River IMS) is designed to automate and simplify the institutional investment process across asset classes, from portfolio management and risk analytics through trading and post-trade settlement, with integrated compliance and managed data throughout. Charles River's growing partner ecosystem enables clients to seamlessly access external data and analytics, applications and liquidity venues that support the demands of their product and asset class mix. Headquartered in Burlington, Massachusetts, we serve clients globally with more than 1,000 employees in 11 regional offices. (Statistics as of Q3 2020)

## About State Street Corporation

State Street Corporation (NYSE: STT) is one of the world's leading providers of financial services to institutional investors including investment servicing, investment management and investment research and trading. With \$36.6 trillion in assets under custody and/or administration and \$3.1 trillion\* in assets under management as of September 30, 2020, State Street operates globally in more than 100 geographic markets and employs approximately 39,000 worldwide. For more information, visit State Street's website at [www.statestreet.com](http://www.statestreet.com).

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\*Assets under management as of September 30, 2020 includes approximately \$81 billion of assets with respect to SPDR® products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

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