MSCI Climate Value at Risk (Climate VaR)

Organization

MSCI

Summary

Climate VaR provides a truly forward-looking dimension for assessing climate scenario-specific transition risks and opportunities for publicly listed companies, their issued securities, and their real assets. The framework is unique in that it provides a broad number of scenarios that incorporate different scenario pathways to help assess the climate impact of investment portfolios. It includes a total of 15 transition and 2 physical climate scenarios.

Climate VaR has: 1) quantified all nationally determined contributions (NDCs); 2) factored in direct emissions impacts, an Electricity Use Model (scope 2), and a Value Chain Model (scope 3); 3) linked companies' environmental impact revenues with a score on low-carbon patents to identify the longer-term innovation potential of companies in the transition to a low-carbon economy; 4) scored a company's exposure and quantified the economic cost impact on each individual company facility in the database; and 5) calculated climate-related costs and green profits on the issuer level and apportioned them to the equity and liability side of the business. The Climate VaR for corporate bonds also considers the maturity date of individual bonds.

Climate Focus

Alignment	Impact	**Risk**

Resource Type

Data & Metrics	**Pathways & Scenarios**	**Assessment Tools**	**Methodology**	Target Setting Guidelines & Verification	**Reporting Frameworks & Guidelines**	Collaborative Initiatives

Intended Users

Banks	**Investors**	**Insurers**	**Central Banks**	**Regulators**

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CLIMATE
AIR
TOOLBOX

MSCI Climate Value at Risk (Climate VaR)

WHO	Climate VaR can be used by financial institutions, regulators, and corporates.
WHAT	• Climate change impacts can lead to a sudden repricing of assets. The Climate VaR metric allows financial institutions to gain insight into the potential scenario-specific, climate-stressed asset valuation of liquid and real assets as well as government securities. • The Transition VaR includes both policy risk (downside risk) and technology opportunity (upside potential) and can therefore also be leveraged to evaluate climate impact. • On the transition side, the cost of emissions reduction requirements is quantified with the help of regional carbon prices. • On the technology opportunity side, potential future green profits are modeled based on current clean technology revenues and a scoring of low-carbon patents. • The Aggregated Extreme Weather Climate VaR aggregates risks from climate-related impacts allocated from the issuer to the security level. On the physical risk side, Climate VaR leverages representative concentration pathway (RCP) scenarios from the Intergovernmental Panel on Climate Change (e.g., RCP 8.5).
WHEN	***Climate VaR can inform investors' climate-related investment strategies, risk management, and disclosure:*** • Implementing net-zero investment strategies and leveraging Climate VaR for climate-tilted portfolio construction • Integrating Climate VaR with enterprise risk management of financial institutions • Computing Climate VaR for Task Force on Climate-Related Financial Disclosures (TCFD) disclosure and reporting progress over time • Leveraging Climate VaR for engagement purposes
WHERE	The model is global and captures all sectors of the economy. Asset classes covered include: equities, corporate bonds, sovereigns, and real assets.
WHY	• The metric can help identify forward-looking climate-related hot spots in investment portfolios or loan books and is therefore ideally suited for risk management. At the same time, the metric facilitates the implementation of net-zero portfolio strategies. • The Climate VaR metric is closely aligned with the recommendations of the TCFD and therefore facilitates regulatory compliance, disclosure, and stakeholder communication.
HOW	• More information can be found at **MSCI's website**, including more information on the Climate VaR **methodology**.

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