

# AQMetrics UCITS Risk Management

Understanding the Risk and Reward Profile of a UCITS fund should not be complex.

AQMetrics simplifies the calculation and presentation of UCITS fund risk information. Our UCITS risk management solution leverages underlying client and market data to deliver an independent, full-service measurement solution that eases the complexity and cost of ensuring regulatory-compliance.

Features include:

- UCITS investment breach monitoring rules library containing 05/10/40, 80/20, issuer, and counterparty rules
- Pre and post trade compliance monitoring and alerting
- Fully auditable alert workflow and documentation management
- Seamless integration to Market Data from a multitude of sources including live feeds from Bloomberg
- Reliable and accurate risk insights. Daily risk reporting
- Ability to handle complex investment instruments. Drill through insight from overall portfolio to individual securities and underlying securities
- UCITS fund risk assessment through the VaR and Commitment Approach. Risk classification of UCITS funds based on AQMetrics analytics
- Multiple VaR methodologies. AQMetrics parameters for VaR reporting are flexible and can be changed by end users on an adhoc basis
- Stress- and back-testing

## AQMetrics three pillars for UCITS risk management

AQMetrics has three main pillars for UCITS risk management:

1. SRRI calculation
2. VaR Reporting
3. Investment Breach Monitoring

## Synthetic Risk and Reward Indicator ("SRRI")

The SRRI is a number between one and seven which will allow investors assess the risk applicable to a potential investment in a UCITS. AQMetrics software automatically applies the appropriate risk class to the UCITS on a weekly basis based on the calculated level of volatility. If the UCITS fund goes outside of the SRRI class specified in its prospectus AQMetrics alerts the firm via SMS messaging and email alerts, as well as alerts in the AQMetrics portal.

## Value At Risk ("VaR")

AQMetrics automatically calculates VaR and continually runs stress- and back-testing to complement its VaR estimation. VaR is calculated intraday or daily depending on the strategy of the UCITS fund.

AQMetrics parameters for VaR reporting are flexible and can be changed by end users on an adhoc basis. The parameters that end users can access from within the AQMetrics VaR reporting module are:

1. Confidence intervals
2. Time Horizon
3. Observation period
4. VaR Method – Monte Carlo or Parametric
5. VaR Approach - Absolute or Relative

By default these parameters are set to a 99% confidence level, one month time horizon, one year observation period. We believe that given the high confidence level required by regulation, shorter observation periods are not appropriate. However, if an end user wishes to change the observation period they can do so easily through selection of an alternative observation period when running VaR reports on an adhoc basis.

Monte Carlo simulation is used by default to calculate VaR numbers at a portfolio level: The system simulates thousands of scenarios based on the assessed behaviours of the risk factors and their relationships, and estimates the possible future behaviour and risk of the portfolio as a whole. The end user can further choose the parametric method. At AQMetrics the essence of parametric VaR is "no data:" while historical data is used to

select a distribution and calibrate its parameters, AQMetrics parametric VaR leans on a statistical distribution to infer losses.

Using AQMetrics end users can choose the Absolute or Relative Approach to VaR. The relative approach uses a ratio of up to 200% between the VaR of the portfolio and the VaR of a reference portfolio. The absolute approach is generally used when there is no reference portfolio or benchmark; it allows the one-month VaR to be up to 20% of the NAV.

## UCITS Investment Breach Monitoring

AQMetrics automatically applies the UCITS conversion methodology as specified by ESMA. Through automated complex analytics AQMetrics translates the derivatives held by the portfolio into global exposures.

Although fund directors oftentimes opt for the VaR risk calculation approach, using AQMetrics the fund can be risk assessed through the VaR and Commitment Approach. The commitment approach and calculation of “global exposure” is further used in the AQMetrics library of UCITS rules that automatically alert when the fund is at risk of investment breaches either pre or post trade.

AQMetrics investment breach monitoring for UCITS funds alerts systematic, idiosyncratic and default risks both at the portfolio and at the security level. Idiosyncratic risks are risks that affect one specific position of the portfolio, while systematic risks affect the whole market or an entire market segment. The combination of the three risk components forms the overall portfolio risk. Systematic risks covered by AQMetrics include basic, currency, credit spread, interest rate curve (term structure), and volatility risks.

AQMetrics establishes alerting levels that are lower than the regulatory maximum limit, as well as escalation procedures, to better manage the risks of the portfolios.

## How we do it



Through AQMetrics established relationships with prime brokers, custodians and administrators, we have the ability to quickly onboard even the largest portfolios and provide a dedicated customer success team to manage the process.

Our goal is to make sure our clients are positioned to respond to both structured and ad hoc demands for risk and exposure information from multiple parties, including portfolio managers, prospective and current investors, boards and regulators. We believe an integrated approach to risk is best suited to meet these multiple needs, as well as provide the flexibility needed in the future. We work with our clients to structure the best solution for their requirements with emphasis on functionality, transparency and cost-effectiveness.