April, 2016

Riskdata Portfolio Optimizer strengthens proactive risk management

Riskdata introduces a high-speed solution to perform asset allocation matching a set of user-defined risk constraints[1], asset allocation constraints[2] and using a custom utility function. The utility function, reflecting fund management's priorities, is defined by striking a balance between: targeted risk contribution (e.g. for risk parity strategies), distance to initial portfolio (to reduce transaction costs) and expected performance. Regarding performance, the solution offers both standard mean-variance methodology, using Markowitz approach and robust mean-variance methodology, achieving a better diversification. Riskdata Portfolio Optimizer allows bridging the gap between Middle Office and Front Office, giving risk managers a proactive risk management tool to further help fund managers in allocating their assets.

Thanks to its real-time computation technology, Riskdata has always been the risk management solution of choice for risk managers and fund managers alike. The company especially promotes its vision of proactive risk management: risk management should not be restricted to a check-the-box task to comply with regulatory requirements. It needs to be an actual concern across asset management companies. To achieve this, close collaboration between Middle Office and Front Office is essential and integrating a portfolio optimizer in a risk management solution is an important milestone in that direction. With Riskdata Portfolio Optimizer, asset management companies now have a tool to reinforce interactions between risk managers and fund managers. We will go through three case studies illustrating our statement: personalization of funds according to investors' risk profile, fund management under risk parity strategies and finally maximization of portfolios expected returns.

Hyper-personalization is the current trend in asset management. An increasing number of web platforms gives investors easy access to optimized funds matching their risk profile. In order to offer personalized investment solutions to their clients, asset managers need to adapt their funds allocation. Riskdata Portfolio Optimizer allows defining a new fund allocation from an existing fund, or from a pre-selected pool of assets, maximizing expected performance while matching risk limits on e.g. VaR or ex-ante volatility. Furthermore, the user may choose to keep the optimized portfolio as close as possible to the initial one thus imroving portfolio stability and reducing brokerage costs. As a consequence, Front Office can readily meet clients' requirements thanks to an effective collaboration with risk management department that helps them allocating their assets.

[1] Riskdata provides a complete set of risk indicators beside VaR and volatility.
[2] Riskdata allows grouping by virtually any key such as strategy, sector or country.

RISKDATA
numbers you can count on

In a pure investment perspective, Riskdata Portfolio Optimizer also facilitates fund management strategies based on risk constraints. For instance, risk parity strategies are based on risk contribution rather than a specific risk-return ratio and consist in allocating the risk of a portfolio equally across different asset classes. Optimizing such portfolios requires close links between fund managers and risk management team. Riskdata Portfolio Optimizer enables risk managers and quantitative analysts putting forward an asset allocation proposal for fund managers which maximizes the expected performance of the fund and balances the risk contribution between assets. As a result, optimizing a fund managed under risk parity becomes easy as 1, 2, 3.

Like many portfolio optimization tools available nowadays, the Markowitz approach is standard within Riskdata Portfolio Optimizer. While being a reference among optimization methodologies, its drawbacks are well known. In a nutshell, this methodology allows maximizing the portfolio expected return while maintaining its volatility below a pre-specified target. However, the assets' return forecast, while being tough to estimate, is a determining factor of the new fund allocation, often leading to an unbalanced portfolio favoring assets with the highest expected returns. Riskdata Portfolio Optimizer solves this issue by offering another approach: the robust mean-variance methodology. This methodology relies on a utility function in which assets with important weights are penalized, leading to more diversification and stability in the portfolio composition, altogether achieving more robust performances.

Maximizing performance is a common concern among fund managers but it cannot be considered without taking risk into account. With Riskdata Portfolio Optimizer, funds are optimized while complying with the chosen risk management strategy. Risk managers and fund managers are working hand in hand to build sustainable performances. This is yet another tool Riskdata offers to achieve a proactive risk management.

About Riskdata

Riskdata makes asset managers' life easier with an all-in-one solution that computes any risk indicators for all asset classes with state-of-the-art mathematical models. The data management team collects and cleanses the data necessary for risk calculations and, subsequently, implementation is smooth and quick. With its unique "real-time" computation technology, Riskdata also gives asset managers the necessary tools to be smarter: to better understand risk with complete drill-down capabilities (risk contribution by sector, by country…), and to run instantaneous pre-trade simulations for measuring the impact on VaR or on volatility.
Riskdata was founded in 2000 and the company operates internationally. Clients are buy-side financial institutions mainly based in New York, London, Paris and Frankfurt, ranging from start-up Hedge Funds to large Asset Managers.
For more information, please visit our website: www.riskdata.com.

Contact

Alizée Hisquin, Marketing manager
+33 1 44 54 35 00
contact@riskdata.com

RISKDATA
numbers you can count on