Portfolio Analysis
Risk Analytics

QED quidPro•Manager

Understanding and managing market risk is fundamental to oversight and responsible asset management.

Portfolio analysis and risk analytics have become more important than ever due to market events of recent past. Investors are demanding increasing transparency, proactive risk management and more detailed analyses than ever before.

To meet these rising responsibilities, investment teams must arm themselves with advanced analytical tools combining complex analytics with dynamic, easy to understand point-and-click reporting.

Analyze, Compare, Understand, and Communicate Investment Decisions

- *Understand the amount of risk contributed to a portfolio by investment mandates, investment styles, countries, sectors, and asset classes.*
- *Determine what contributes to changing risk profiles from period to period.*
- *Hedge investment risk in an actively managed portfolio.*
- *Conduct portfolio to benchmark risk profile comparisons.*

I am a Safe Driver

Managing Risk in Complex Systems May Not be Obvious

On a recent snowy January Monday there was a 40-vehicle pile up on a Northeast highway—snow and highway driving defines a significant measure of risk—**right?**

Interestingly, statistics show high speed driving on a snowy January day is far from the riskiest time to drive. As it turns out, an August Saturday is the most dangerous driving period according to the experts at the National Highway Traffic Safety Administration.

Driving, **like investing**, occurs within a broad complex system and, **like investment risk**, driving risk is a function of many **explicit and implicit factors**. The NHTSA is tasked with understanding all factors affecting our road safety. ***Who is tasked with understanding risk factors affecting your investment returns?*** Quantal's hybrid risk management platform can help.

Precise and Timely Analysis for Professional Managers

Understanding the risk and return balance of any investment strategy is a crucial component of the investment oversight professional investors exercise whilst managing the assets they control. Moreover, the evolution of fiduciary responsibility coupled with the growing sophistication of global markets has heightened awareness and expectation of performance measurement and risk management.

Responding to the call for enhanced risk management processes, financial practitioners across the world are increasing their focus on technological capabilities for analysis, recognition, response, control, and communication of risk factors that affect investment strategies they employ.

Addressing this critical facet of portfolio management, QED delivers industry -leading risk analysis providing insight into the factors that impact structural shifts in the marketplace along with accurate forecasts of risk exposure to professional investors to assist in offsetting asset management risk.

Branded, Professional Communication of Risk Measures

Through a unique partnership with Quantal International, QED clients are provided full access to Quantal's Risk Reports package. Fully integrated into the QED Financial Enterprise Software platform, the risk reports package is a 'set it and forget it' managed service delivered directly from QED to the desktop.

Summary and detailed portfolio risk analyses are powerful tools that illuminate past performance and help manage forward looking strategies. Generated as custom-branded , pixel-perfect reports in several output formats, risk reports include overall portfolio market risk, portfolio and security level correlations, and security level details and factor analyses.

Quantal's Implicit Factor-Based Model for Today's Markets

The distinctive value of the Quantal implicit multi-factor risk model is derived from its proprietary combination of the best features of explicit and latent factor model developed by legacy competitors.

The implicit factor-based model adapts to market-level behavioral swings and structural shifts in the market as they occur, ensuring forecasts capture the dynamics of the underlying factor structure to protect investors from being surprised by new sources of risk.

Unlike explicit factor models or two-step hybrid models—which require revisions in the model specification to capture such market changes—Quantal's implicit factor risk and returns models are especially responsive to structural shifts in the marketplace, and provide accurate forecasts of risk exposure to investment managers over their portfolio rebalance horizons.

Quantal risk analytics provide the most up-to-date analyses available and include VaR, systematic and idiosyncratic risk, and risk exposure to market factors such as inflation, interest rates, exchange rates, international markets and commodity prices at the portfolio and security level.

Technologically advanced, rigorously engineered, and proven in practice, the Quantal risk engine powers QED's delivery of customized risk reports—***critical analysis when and where it is needed***.

Quantal International

Transforming Investment Ideas into End Results

Quantal's global "hybrid" multi-factor models for equities and government bonds combines the accuracy of an implicit factor specification - where common risk factors causing stocks to move together are inferred from those stock co-movements - with the explanatory power of an explicit model where risk exposures are attributed to cross-sectional characteristics.

Quantal models were developed by **Paul Pfleiderer** (C.O.G. Miller Distinguished Professor of Finance at the Graduate School of Business, Stanford University) and **Terry Marsh** (Professor Emeritus of Finance at the Haas School at U.C. Berkeley) of Quantal International.

Quantal's ***Risk Models*** have been tested and refined over the past fifteen years. Now delivered in partnership with QED Financial Systems these analytical tools are available to augment your business and support your clients.

Innovative Risk Analysis for Changing Market Conditions

- *Based on timely observations of market forces; Quantal's implicit model does not assume a rigid structure for the factors underlying stock returns, but is flexible and adaptive as the factor structure shifts across time.*
- *Explicit factor models assume they have chosen the complete set of factors that model the market. They fall apart when new factors appear such as the 'rise of the Internet' or 'sub-prime lending'. Adding new factors to explicit models can take years.*
- *Explicit factor models require each factor to have an accurate proxy. This may be fine for factors such as Dividend Yield, but not for factors like unemployment rates in China.*
- *Risk models often assume returns are normally distributed; Quantal's models are fat-tailed for daily returns.*
- *By simultaneously considering both explicit and latent factors, the model takes into account 'alpha factors' such as a firm's 'green-ness,' the strength of its management bench or its dependence upon an immigrant labor force.*
- *Quantal's model adapts itself quickly to structural shifts in market risk by placing more emphasis on the recent past and by using daily pricing data. Quantal's model can also incorporate consensus views of current market volatility as revealed in the VIX implied volatility index.*

QED

Risk Measurement Reporting is delivered from the QED platform directly to your desktop as a stand-alone service. Powerful, secure, and accurate computational engines turn basic investment position and transaction data into detailed analysis reports. From VaR measurement to official books of record portfolio accounting, the QED Financial Enterprise Software platform empowers and streamlines investment business.

Please contact QED Financial Systems for additional information.

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