



Deciphering Hedge Fund Returns

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Institutional investors are employing advanced risk modeling schemes in order to evaluate investments in hedge funds alongside their traditional equity and fixed income investments.

“Investors are getting much more serious about their diligence and commitment to managing the risk and return dynamics of their existing overall investments,” David Merrill, CEO of FinAnalytica, told Markets Media. “In addition, they are becoming much more proactive in their evaluation of potential new investments from the perspective of how it impacts their overall risk profile.”

One of the major challenges in modeling hedge funds is data availability. Typically, hedge funds report monthly returns with little transparency into the actual positions in the portfolio.

“In order to model hedge funds together with equities and fixed income instruments, you need to resolve the mismatch in data frequencies,” said Merrill.

The solution is to normalize hedge fund returns through a statistical technique known as infilling.

"Infilling is a process whereby portfolio assets with varying reporting frequencies--daily stocks, weekly and monthly funds and quarterly illiquids--are harmonized to a common frequency so that analytics can be run across the entire portfolio as well as at the asset class level, providing enterprise multi-asset class reporting required by institutional investors," said Merrill.

By transforming quarterly reported asset returns, typically illiquids such as real estate and private, into monthly returns, infilling converts all assets to a common monthly frequency while still maintaining the statistical properties of the original returns.

“Infilling provides institutional investors an enterprise view of their risk by allowing them to combine their less frequently reported illiquid assets with the traditional and alternative asset classes,” said Merrill. “Now portfolio managers and risk managers have a real estimate as to how much of their total risk is coming from illiquid assets.”

PerTrac has incorporated FinAnalytica's advanced regression-based infill techniques into its RiskPlus analytics system. “Using regression analysis, the infilling decomposes the variance of assets into 'factor components' to create a new monthly time series while maintaining the statistical properties of the original quarterly series," said Merrill. “Customers are now able to assess both liquid and illiquid assets in a single risk model.”