

## Assessing the strengths of a hedge fund manager

By Ira Kawaller, founder, Kawaller & Company

**HOW DO YOU RATE** a hedge fund manager? One way is to assure that he or she has the capacity to stick to a strategy, thereby generating returns consistent with expectations – expectations that are typically based on historical performance.

Unfortunately, these assessments can be complicated as many money managers' track records are fairly short-lived. Making a judgment based on the fact that a manager made nice returns over the past couple of years is a demonstrably deficient extrapolation of a small sample experience. Put another way, evidence of gains, by itself, is not enough.

A second consideration is often the funds volatility or drawdown history (an accounting of past losses – either period-to-period or peak-to-trough). For many, a record of large drawdowns or high volatility automatically disqualifies a manager or asset class from further consideration. But this view, too, is overly simplistic.

Consider, for example, the choice between two investment programmes. Assume both require a cash investment of \$250,000, but one defines the account size to be \$250,000 while the other defines the account size to be \$1m. Assuming identical trading under the two designs, it should be clear that the smaller account size will report returns and volatilities of roughly four times those reported by the account with the higher notional size. These two designs would have identical values at risk, but the manager of the accounts having the larger notional size would stand to earn four times the administrative fees, relative to the manager of the smaller accounts – assuming both applied the same administrative percentage charge. The participation charges, on the other hand, would be about the same for the two designs, given that the profits (ignoring administrative fees) would be identical.

Two conclusions would seem to follow: first, portfolio managers should want to make the account size to be

as large as possible, but when they do, analysts should be smart enough to realize what's going on. And second, trading history can be represented in a myriad of ways. This variety or representations creates a bit of a quandary.

To some extent, this quandary may be mitigated – or at least addressed – with the aid of the Sharpe ratio. Despite its appeal, however, the Sharpe ratio is not a panacea. While higher Sharpe ratios will likely be preferred to lower, comparisons across managers and/or strategies may lead to misleading conclusions, as seemingly appropriate inferences may not be valid if the two respective return distributions are dissimilar – as is often the case. Also, programmes that are based on the same trading histories, but constructed with different notional investment increments, will have different Sharpe ratios.

Arguably, the better way to handle the question of volatility is to let an optimisation programme sort it out for you. But this advice also deserves to be tempered. The reservation arises because even though optimisation programmes are now state-of-the-art, reliance on them is often based on a shaky foundation. That is, the 'solution' requires inputting information about the expected returns and risks of the prospective portfolio components, as well as information about their co-variances.

Common practice typically relies on historical analysis to come up with these inputs – but what history? Should the inputs be derived from the past three months of data, three years of data, or what? While there is no 'right' answer to this question, whatever the chosen time span, one thing is clear: the user of an optimisation programme should not assign a particularly high confidence that historical relationships will continue in future periods.

In considering the track record, the most relevant statistic should likely be the strategy's expected return. The longer the history, the greater the confidence one should have in this estimate – provided the historical results reflect a consistent investment approach over the reporting period. Without such consistency, or without an extended historical data series, no statistically valid conclusions can be made. It should be understood that whatever 'due diligence' means, it doesn't meet the standard of being statistically valid.

Unfortunately, given the nature of the data which is available for analysis, the most sophisticated statistical tools can't overcome the fact that we live in a probabilistic world. Given any trading position, like craps, sometimes you win and sometimes you lose. A sound philosophical basis for trading, however, loads the dice in your favour. ■



**IRA KAWALLER** founded Kawaller & Company to assist businesses in their use of derivative instruments to manage financial risk. The practice serves a limited clientele of corporate treasury departments, commercial and investment banks, pension funds, mutual funds and accounting firms. Kawaller was previously the vice-president-director of the New York Office of the Chicago Mercantile Exchange, where he was responsible for promoting financial futures and options to the financial sector. He has also held positions at J Aron & Company, AT&T and the Board of Governors of the Federal Reserve System. He is currently a member of the Government Accounting Standards Board's Derivative Instrument Task force on Derivatives and Hedging.