L'analyse des risques des fonds de fonds alternatifs devient essentielle

La détermination du degré de risque inhérent à la gestion de chaque fonds est essentielle. À l'instar des fonds traditionnels, les fonds de fonds alternatifs sont de plus en plus soumis à une pression de la part des investisseurs, pour qu'ils affichent une plus grande transparence quant aux techniques de gestion utilisées. Toutefois, le calcul des risques peut se heurter au manque de flexibilité de certains systèmes informatiques.

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■ Shaken by recent debacles such as Ahold and Parmalat, investors are demanding more information on where their capital is deployed. Funds of hedge funds are therefore under increasing pressure to employ effective risk management processes and provide efficient reporting. Also, institutional investors are increasingly looking at funds of hedge funds as a way to generate more reliable returns in current market conditions, contributing to the industry's 20% per annual growth rate. However, with this additional institutional capital comes the expectation of disciplined risk management.

Risk analysis enables the fund to provide investors with a better idea of the risks the managers are taking. When used with performance data it can provide a more meaningful assessment of the manager's risk adjusted return. A recent trend has been to provide a Value at Risk (VaR) based approach in addition to commonly used ratios such as Sharpe. While Sharpe used in isolation has recently been the subject of much scrutiny, VaR can provide a meaningful comparison of risks across different asset classes and instruments, and therefore is ideal for analysing the diverse strategies in a typical fund of hedge fund portfolio. Despite the benefits of such risk analysis, many funds have still not tackled this issue successfully. Many fund of funds simply do not yet know the most effective way to tackle commonly experienced problems.

Risk reporting

One of the first things the manager of a fund of funds needs to do is to establish exactly what level of risk reporting is best for his business. There is little point in pursuing a level of transparency that will not add any value to the investment process. For example,

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the frequency of risk reporting should be determined by the stability and the optionality of the products each fund trades: one size does not fit all. It is important also to establish which parameters in the analysis add value. These could for example, be the biggest contributions to risk by sector or something more specific, such as the average interest rate and credit risk of a particular fund.

Probably the largest problem facing a fund of funds is that of data aggregation from a potentially large number of underlying sources. These will often be in disparate formats and be delivered at different times. These issues are equally sensitive and demanding and are not solved easily or cheaply using traditional approaches.

Although many investors receive full position disclosure for many of their investments, such disclosure by managers is not always the solution. Some managers have expressed significant concerns over the harm that full position disclosure could cause for many common hedge fund strategies, for example macro and risk arbitrage. Also, many investors do not want to force any disclosure that would be disadvantageous to the manager, and therefore to their investment. For those funds that do not place the investor's interests at risk through such disclosure, a view of, say, the top ten single exposures and concentrated sector exposures expressed on a net basis can be a useful compromise. Absolute value may be used to protect the directional position of the manager. However, some sceptics have observed that the availability of information on long equity holdings can be combined with any net holding information to derive short positions and therefore that net position disclosure could be detrimental and should not be made.

Where it is not possible to disclose the top ten single exposures, disclosure by asset class and by region can be useful, but should be limited to protect in-

* Parts of this article are based on a consensus document published by the International Association of Financial Engineers' Investor Risk Committee. See www.iafe.org for more.

vestors against predatory trading against the manager's positions. For many managers the reporting of summary risk, return and position information can be sufficient as an alternative to full position disclosure. Such summary information should be evaluated on the following four criteria:

- Content : describes the quality and sufficiency of coverage of the manager's activities. This covers information about the risk, return and positions on an actual as well as on a stress-tested basis.
- Granularity: describes the level of detail. Examples are NAV (Net asset value) disclosure, disclosure of risk factors (APT, VaR, etc.), disclosure of tracking error or other risk and return measures at the portfolio level, by region, by asset class, by duration, by significant holdings, etc.
- Frequency: describes how often the disclosure is made. High turnover trading strategies may require more frequent disclosure (for example, daily) than private or distressed-debt investment funds where monthly or quarterly disclosure might be more appropriate.
- Delay : describes how much of a lag occurs between when the fund is in a certain condition and when that fact is disclosed to Investors.

Transparency

Full transparency is where the underlying fund has no issue with providing full positional level details to the fund of funds and therefore to the risk service provider. In this situation the question is not transparency but merely data aggregation, which is covered below.

Often the fund is not happy to provide the full position transparency to the fund of funds. This is because in doing so they might require themselves to make that data readily available to all of their investors. However, by introducing an independent third party and sending the full position level data to them they circumvent this issue. The risk provider can then run the analysis using the complete holdings and simply return a summary of the risks to the investor or fund of funds. In most cases the underlying fund will require the provider to sign a non disclosure agreement, but this rarely causes problems.

If the underlying manager wishes the risk provider to filter the information back to the fund of funds, this has implications for the way in which reporting will be provided to the fund of funds. The risk service provider has to be able to filter data and show risk analytics within the fund without allowing access to individual positions.

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Unsurprisingly, there are a large number of funds that are not prepared to provide full transparency to any party. But some analysis can still be performed. Although the fund is not prepared to reveal the specific holdings in many cases they will provide a periodic (NAV) and/or some sensitivity to risk factors, e.g. equity, interest rate, FX (Foreign exchange).

Risk calculations

In the case of NAVs, risk calculations can still be performed and aggregated with full disclosure positions from other funds. This can be done by constructing a synthetic time-series for the fund based on the information provided. This kind of technique, such as an Expectation Maximisator Brownian Bridge algorithm or backfilled time series, produces the best estimate for the co-variance matrix using all the available information and then calculates the conditional expected value of the missing returns.

Where sensitivities to various risk factors are provided, again, risk calculations can still be performed and aggregated with full disclosure positions from other funds. In this case however, the fund is represented by its deltas and the historical volatility of each underlying factor (e.g. individual yield curve tenor, equity etc.) is calculated and used to derive the Value at Risk. Clearly the more information that can be provided, the greater the validity of the resultant output, but in the absence of any alternative, this approach is perfectly acceptable and provides risk analytics which can be used.

Most hedge fund of funds invest in a large number of underlying funds. Some also invest in other funds of funds. To consolidate all the associated underlying positions and aggregate them into a single picture of overall risk involves managing a large amount of data that is often held in different formats and layouts. Consequently, many funds of funds and traditional risk service providers, whose systems accept data only in a pre-defined format and layout, have problems in providing meaningful risk management analytics.

It is neither realistic nor practical to impose a single data format or layout on each of the fund of funds' underlying managers, especially given implementation cost and time to market constraints. If this were attempted, some funds would be ready and able to comply but others would not.

The answer is to employ an adaptable risk system that accepts data feeds in a variety of layouts, from a variety of sources: funds' own portfolio management systems, prime broker platforms, fund administrator systems, etc. Not all providers offer this level of flexibility but an effective solution allows the manager to focus on the core competences of asset allocation and manager selection. ●