



Understanding tail-risk hedges and funds – part one

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Conversations surrounding tail-risk started gaining more frequency with both investors and funds starting with the collapse of Long Term Capital Management as a result of the 1998 Russian debt default crisis. Since then, rolling crises from the 2007 "quant" crisis, to the 2008 global financial meltdown and most recently Grexit have made tail-risk hedging a hot topic. New funds, books, papers, and summits are springing up throughout the financial universe discussing tail-risk, whether it can be effectively hedged and how investors can fund the experiment. In this series, Opalesque will examine some of the more common tail-risk hedges, the funds in this space and what investors can expect.

The 10,000 foot view

Tail-risk strategies are essentially designed to perform well in the worst of market conditions. They act as insurance policies, requiring investors to pay in to a losing strategy until something bad happens. Tail-risk hedges are said to be most effective in environments where market participants see declines of at least 20%, providing much needed liquidity while the rest of their portfolio is spiraling toward the bottom. These declines are commonly known as fat-tails or black swan events. The individual strategies themselves are derived from calculating the probability of such events.

Tail-risk hedges are gaining more attention from institutional investors like public pension funds which have a mandate to provide a certain level of return and have been on more or less shaky ground since 2008. Tail-risk hedges can however, act like a double edged sword for this type of investor as they lose money until a fat-tail event happens, thereby making it seem as though the fund just allocated into a strategy doing the exact thing it seeks to avoid.

Tail-risk hedging can take a variety of forms most of which require fairly technical understanding of investing, but, in essence an investor or fund will take a contrarian macro position. One of the more popular forms of this is buying long-term "put" options. Put options give a fund the right to sell an underlying stock or security on the expectation of a drop in price. Long-term put options are typically available in smaller quantities and become more expensive as volatility increases. Other variations on this theme include variance swaps a derivative that bets on the magnitude of volatility.

The CBOE Volatility Index (The VIX), also known as, "the fear index," is a measure of the implied volatility of S&P 500 index options. The VIX, as an index, also serves as the basis for several Exchange Traded Products (ETPs) which track its performance. As a result, many products which track the VIX often get lumped into tail-risk hedges – this is where things get murky for investors and some managers trying to understand tail-risk.

The debate

Some financial observers have said that you can't actually hedge tail risk, because black swan events are by their very nature meant to be unpredictable. Felix Salmon at *Reuters* wrote [a piece](#) on this last year, noting that conceptually tail-risk hedges are offering probability based bets on events which by their nature are improbable.

More recently, investors have also started to [voice concerns](#) that managers themselves are too unclear on the difference between managing tail-risk and betting on volatility. In a piece on endowment involvement in tail-risk funds, in *Pensions & Investments*, Christine Williamson [writes](#) that investors can expect to see an expense of between 50-200 basis points per-year for tail-risk strategies, which may really be a tail-risk/volatility bundle.

Critics of tail-risk strategies argue that investors would be better served to diversify through more cost effective means. In a [paper entitled](#), "Chasing Your Own Tail (Risk)," AQR Capital Management urges investors to look more closely at uncorrelated alternatives and low-beta equities, rather than allocating to tail-risk hedges.

However, in a different [paper](#), "Tail Risk and Hedge Fund Returns," co-written in March of this year, by Professor Bryan Kelly, at the University of Chicago, and Professor Hao Jing, at Erasmus University, they argue that investors must better distinguish between the skill of hedge fund managers and their propensity to take on extra risk. They note that many of the high returns generated by funds are precisely because they are much more tail-risky, especially capital-seeking early stage managers.

They write, "We have shown that hedge funds exhibit persistent exposures to extreme downside risk. For instance, the very same hedge funds that underperformed in the 1998 crisis suffered predictably lower returns during the 2007-2008 crisis...we find that tail risk is an important determinant of the time-series and cross-section variation of hedge fund returns." According to the authors, the data presented is, "consistent with the notion that a significant component of hedge fund returns can be viewed as compensation for providing insurance against tail risk." Despite concerns, assets keep flowing into tail-risk funds. JP Morgan Chase & Co's global asset allocation group shows that assets in tail-risk hedge funds were approximately \$38bn in April 2011. *Bloomberg reports* that volatility funds are also pulling in assets at a solid rate. Recent, periodic drops in the VIX have so far had little effect on inflows into tail-risk strategies and as Opalesque has [reported recently](#), new funds and ETFs have been launched within the first half of this year.

This debate will be the basis for the rest of the series in which we will examine the structures of these investments and their effectiveness. Read part two [here](#).

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