HEDGE FUND BENCHMARKING AND INCREASING ABSOLUTE RETURNS

Summary

For many investors, the goal of allocating to hedge funds is to improve risk-adjusted returns, lower portfolio beta while increasing alpha, and/or dampen volatility through diversification. Investors can allocate to hedge funds to achieve these goals, but they can also invest in a mix of equities and bonds. With the recent strong performance of equity and bond markets, investors may wonder why to even bother with hedge funds.

But investors should consider forward-looking expectations for bond and equity returns, not backward-looking comparisons. With today's low interest rate regime, our forward-looking expectations for bond returns are lower. A hedge fund portfolio should not be considered a direct replacement for either equities or bonds, but rather it should be considered an alternate allocation to a combination of stocks and bonds. If hedge fund allocations are implemented and measured appropriately, investors can improve absolute returns on their portfolio, with the expectation that hedge funds can generate additional returns ("alpha") over their liquid counterparts.

Hedge fund benchmarking

To derive what mix of stocks and bonds to use in comparison with a hedge fund program, consider the long-term equity beta of those hedge funds. Beta is the degree to which an investment moves in line with equities – a beta to equities of 0.4 indicates that investment can be expected to move roughly 40% as much as equities. (see Table 1) As such, it is a good approximation for the level of equity-like returns we can expect from the portfolio. While the beta exposure can vary from one year to the next, over longer-term periods, the beta of most diversified programs does not vary greatly.

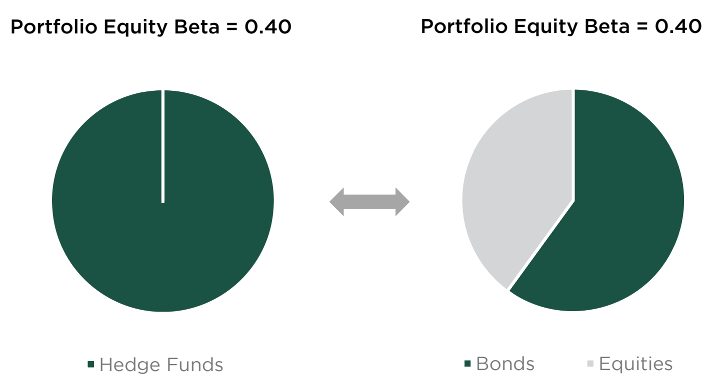
Table 1 : Average five-year rolling betas to the MSCI ACWI IMI, January 2004 to December 2016

	Average Beta	Standard Deviation
HFRI Fund Weighted Composite Index	0.34	0.02
HFRI Equity Hedge (Total) Index	0.48	0.02
HFRI Macro (Total) Index	0.09	0.03
HFRI RV- Multi-Strategy Index	0.22	0.04

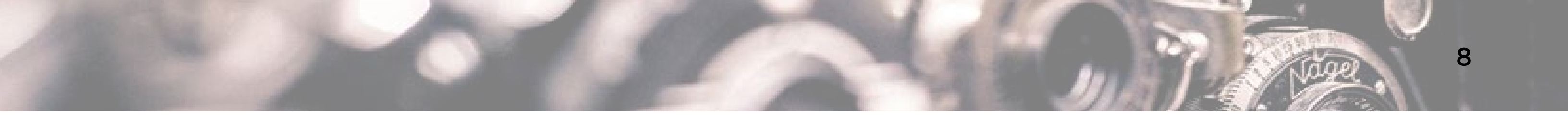
Source: HFR

Since investors can lower their beta by a comparable amount through stocks and bonds, a mix of traditional investments is a good benchmark for evaluating a hedge fund allocation, with the amount in stocks based on the beta of the underlying hedge funds. For example in Figure 1, a client could allocate to a hedge fund program with a beta of 0.40, or to a portfolio of 40% equities and 60% bonds, and achieve a very similar reduction in equity risk. In this example, then, we would use a 40%/60% equity/bond mix to evaluate the hedge funds.

Figure 1 : Comparable Portfolios*



*for illustration purposes



Since both portfolios are expected to produce about 40% of equity market returns over time, the focus is on whether hedge funds can earn enough "alpha" to be competitive with the bond component of the portfolio. Alpha is defined as any performance the hedge funds achieve above their expected beta returns (in this example, expected beta returns are 40% of the equity market). A hedge fund allocation makes sense if it can earn more in alpha than the returns earned from bonds in the liquid portfolio.

To put the above example in the form of an equation (where E(R) = Expected Returns):

Allocate to hedge funds if hedge fund alpha > contribution from bonds:

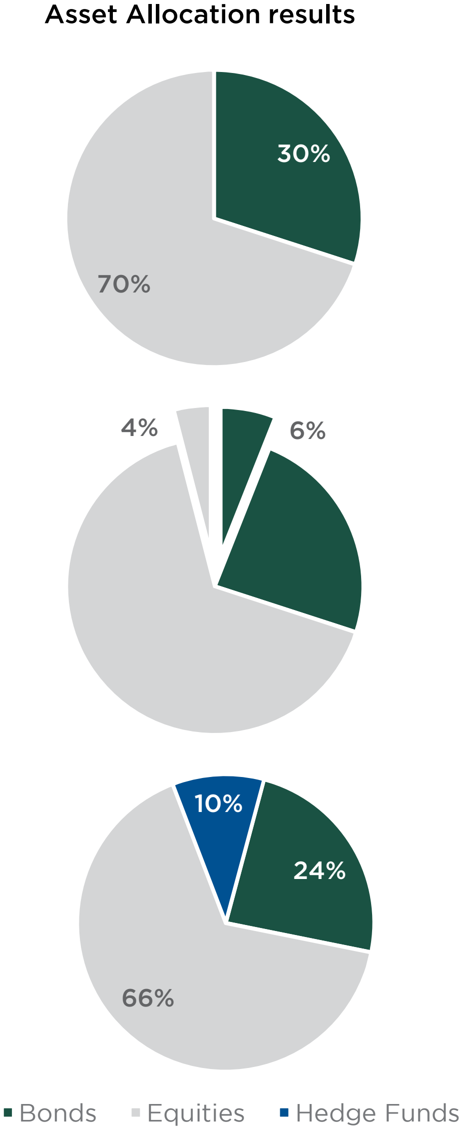
$$Alpha \geq [E(R)_{Bonds}*60\%]$$

How to apply this framework in asset allocation to improve absolute returns

Because hedge fund betas tend to be less than 1.0, clients that have funded hedge funds entirely out of their equity sleeves will be systematically earning less equity market returns than their benchmark. So how should investors implement hedge fund programs? First, investors should determine the desired equity exposure for their overall portfolio. Then, they should determine their tolerance for hedge funds, including liquidity and tracking error constraints. Finally, they should substitute equity and fixed income exposures with hedge fund exposures, using X% from equities—where X is the equity beta of the hedge fund program—and having the balance come from fixed income. In the above example where the hedge fund beta was 0.4, 40% should be taken from equities, and 60% from bonds, to allocate to the hedge funds. This approach ensures that the equity beta of the portfolio is not diluted by the addition of hedge funds–which is important for clients trying to maximize absolute returns.

As an example, consider an investor that conducts an asset allocation study and decides to target 70% to equity and 30% to bonds. Based on their confidence in the hedge funds' ability to generate alpha, they can choose from several different approaches, each of which keeps their beta-adjusted equity exposure at 70%. See Figure 2 for an illustration and Table 2 for some scenarios.

Figure 2: A hedge fund asset allocation that keeps equity beta constant*



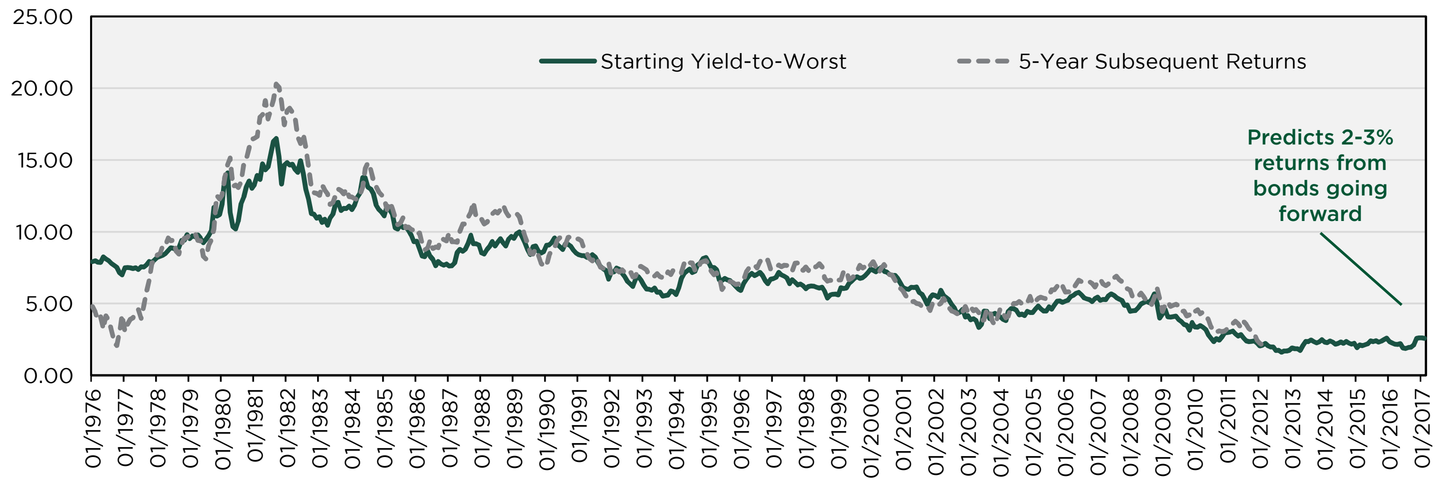
*for illustration purposes

Table 2: Different portfolio options for generating 60% equity market returns

Different ways to achieve 60% equity exposure				
Long-Only Equity Index Exposure (Beta = 1.0)	70%	68%	66%	64%
Hedge Fund Exposure (Beta = 0.4)	0%	5%	10%	15%
Bond Exposure	30%	27%	24%	21%
Expected Equity Exposure	70%	70%	70%	70%

Source: Equity Index used in the above calculations is the MSCI ACWI Investable Markets Index, and Bond returns are the Bloomberg Barclays U.S. Aggregate Index. Hedge fund returns are for the Credit Suisse Long/Short Equity Hedge Fund Index. Time period for return statistics is January 2010 through December 2016.

Figure 3: Bloomberg Barclays U.S. Aggregate Index yields, and returns over the following five years



Source: Barclays Capital

Return expectations for today's markets

Over multi-year horizons, the returns earned on a bond portfolio track well with that portfolio's starting yield. Given how low bond yields are today, the expectations for bond returns have been weakened (see Figure 3). Given that hedge funds should be compared to some combination of stocks and bonds, it is clear that the absolute return expectations for hedge funds do not need to be excessively high to add value over a liquid asset benchmark.

Given that investors will likely fund hedge fund portfolios with equities or fixed income, a custom index that is a combination of X% [Equity Index] and (1-X%)[Bond Index] can give investors the ability to see the full effect of their decision to allocate to hedge funds, which includes decreasing interest rate sensitivity and adding diversification.

Final thoughts

Looking at an allocation to hedge fund managers through this lens, consistency of alpha becomes even more valuable. Manager alpha will vary over time, and we would not eliminate any managers from inclusion in client portfolios simply due to recent underperformance. There are value-oriented, opportunistic managers that are worth investing in, but many of these strategies have wider distributions of returns, and can experience longer episodes of negative alpha relative to their more conservative peers. Clients should consider this when constructing portfolios and sizing managers. Correlation between managers is also very important to achieving more consistent alpha in hedge fund portfolios. We will discuss these topics in future articles.

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