

“After the wheel, God’s greatest invention was the carry.”
Private Equity Titan

FEE REDUCTION AND ALPHA GENERATION

WHY FEE REDUCTION IS THE PUREST FORM OF ALPHA

In this note, we examine the relationship between the hedge fund fee structure and how it impacts alpha.

In the early days of the industry, higher management fees were designed to cover costs of a deep and rigorous research and investment process; performance fees were meant to reward the manager for alpha generation. The standard 2/20 fee structure made sense when hedge funds were smaller and either truly “hedged” – offsetting long and short positions and hence little market exposure – or focused on markets like commodities where beta alternatives were not obvious.

Over the past decade, several changes in the industry have drawn attention to the issue of whether the standard hedge fund fee structure is equitable. Today, a good portion of the industry – event driven, equity long/short – has consistent and identifiable exposure to equity market beta; likewise, as we’ve gained a more comprehensive understanding of hedge fund performance, it has become clear that more diverse forms of beta explain the majority of returns. This raises the question of whether investors are overpaying for sources of return that can be obtained more cheaply and efficiently elsewhere. Finally, the concentration of capital among larger funds has created windfall profits for managers as management fees no longer just cover costs but have become a valuable profit center.

As shown below, we argue that high management fees can be a direct transfer of valuable alpha from investors to the managers. In fact, a reduction in management fees results in a dollar for dollar increase in expected alpha. In this way, *fee reduction is the purest form of alpha*.

Less intuitively, we also argue that performance fees can be equally problematic. As beta returns rise, fund returns generally increase as well. However, the absence of a hurdle rate means that investors often pay incentive fees on beta. Consequently, as markets rise, alpha received by investors can actually decline.

BREAKDOWN OF HEDGE FUND RETURNS

Investors today are much more knowledgeable about the composition of hedge fund returns. A framework that includes multiple forms of beta has supplanted the simple model of equity beta/alpha. The very definition of beta has broadened to include benchmark strategies and other investment programs designed to efficiently deliver returns from more exotic risk premia. The net effect of this is that over time, betas have come to explain a greater and greater portion of returns, which leaves less and less in the “pure alpha” category.

The current thinking is that there are four primary sources of returns: static beta, dynamic beta, alternative beta and alpha. A brief description of each is included in the box below.

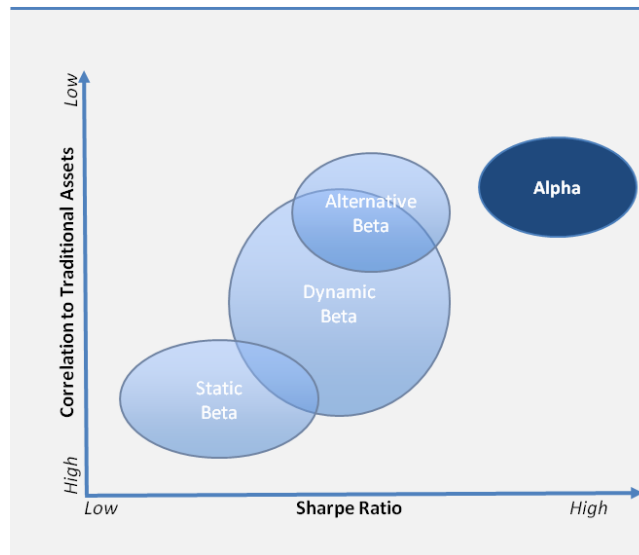
BH

In practice, when looking at an individual fund, it can be difficult to cleanly distinguish between different categories. Should we consider the decision to cut risk prior to a market drawdown alpha, dynamic beta, or simply luck? As the firm evolves and markets change, at one point does a shift in static betas represent a form of dynamic beta? Into which category should we place dynamic allocations to alternative betas? More broadly, as investor sophistication grows, will we continue to move more and more sources of alpha into defined beta categories?

In the chart below, we order the different sources of returns according to expected correlation to traditional assets and Sharpe ratio. Static beta clearly has the highest correlation to traditional assets and a low expected Sharpe ratio.

Alternative betas have a higher expected Sharpe ratio and much lower correlation to traditional assets, which is precisely why they used to be categorized as alpha. Dynamic beta – shifts in exposures and asset allocation weights – is much more variable. Alpha stands on its own with both a very low correlation and very high expected Sharpe ratio.

Alpha	Stock or security selection Illiquidity premia
Alternative Beta	Risk premia from established trading strategies Benchmark strategies
Dynamic Beta	Strategic and tactical asset allocation Relative value trades across asset classes or geographic regions
Static Beta	Stable long exposure to equities, rates, credit and other asset classes



Clearly, the most valuable portion of the return stream is alpha. This is what investors seek when they invest in hedge funds: a reliable source of returns that is noncorrelated to the rest of their portfolio. The justification of a high fee structure is grounded in the belief that a talented manager can generate excess returns over time, and that these returns will be utterly uncorrelated to overall market movements. In fact, the very statistical definition of alpha is most easily visualized as the return that the fund should generate when the market return is precisely zero.

In this light, the expected alpha of a portfolio should be highly stable and noncorrelated. This can seem counterintuitive at first. After all, every manager has good and bad years; market conditions at times are better and worse for a given strategy. The point is that investors *expect* alpha to be noncorrelated and that there is no logical reason why the excess returns should be driven directly by market conditions. After all, if alpha

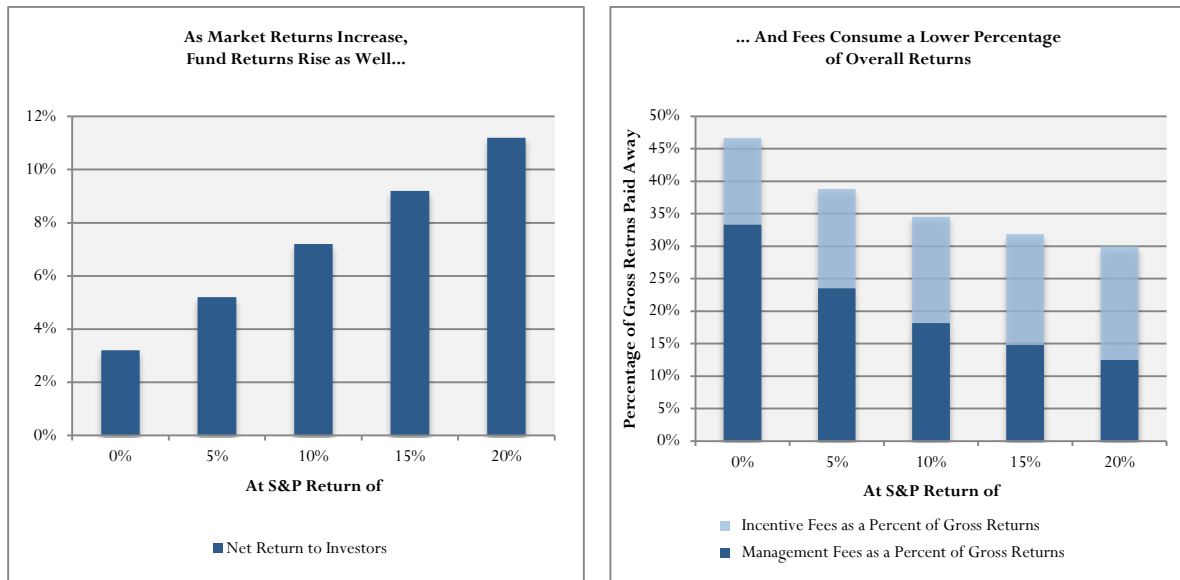


predictably increased in rising markets, then by definition we would classify a portion of it as beta. Therefore, alpha generation must be truly independent of the various forms of beta.

ALPHA, HEDGE FUND RETURNS AND FEES

With this framework in mind, assume we have a simple hedge fund that has a net exposure to the S&P of precisely 0.50 and delivers 600 bps per annum of alpha before fees. The manager does not employ alternative beta strategies and market exposure does not change over time. As noted, alpha generation does not vary with market returns. Due to the fund's remarkable consistency of outperformance, the manager is able to charge a 2% management fee and 20% carry.

Given the stability of alpha, all variation in fund returns will be driven by moves in the market. In the chart on the left, we show net fund performance at market returns of 0% to 20%. In the chart on the right, we show how total fees paid decline as returns increase, which is what investors expect.



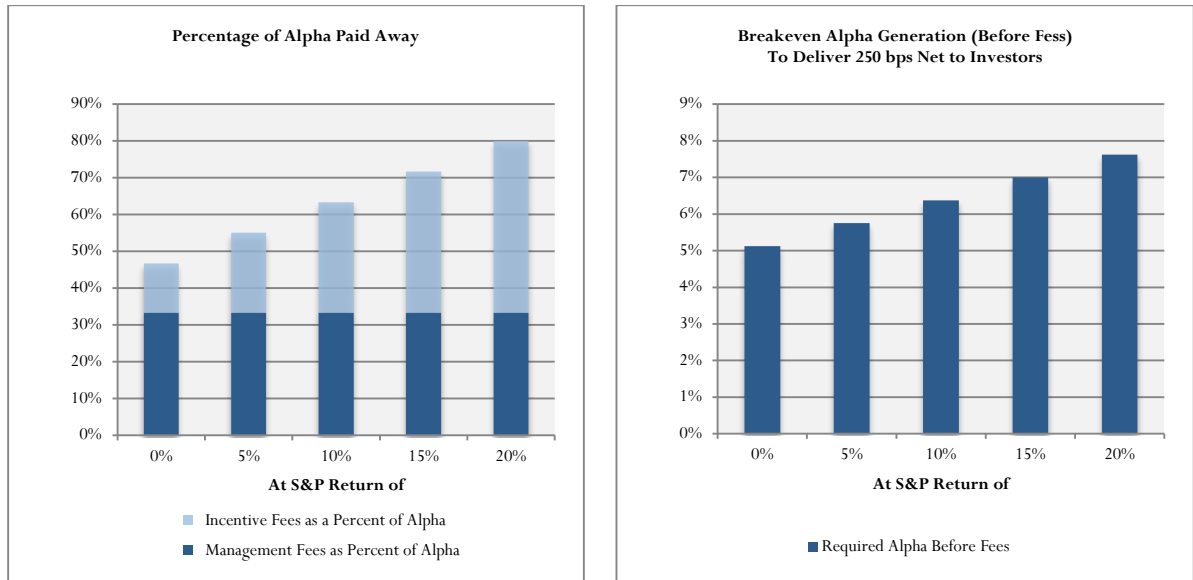
For instance, with the equity market up 10%, the fund returns 7.2%, 220 bps of which is alpha. Certainly, almost 35% of gross returns were paid to the manager, but roughly half of this consisted of performance fees which are paid only when the fund performs well. Most investors would be content with this.

But what is the effect on alpha received by investors? When the market returns zero, the manager earns 6% before fees. Even though we pay away 2.8%, we've earned 3.2% in a difficult year for equities and our manager has delivered 320 bps of alpha. Simply, the manager generated 600 bps of alpha and we were willing to pay away 47%. Expensive for sure, but alpha is highly valuable, and not many funds can consistently deliver it.

But what happens when the market returns 10%? As noted, the fund returns 7.2% and investors received 220 bps of alpha – again, a very respectable performance. Performance has increased, yet alpha has declined. At a market return of 20%, the fund gains 11.2% net while alpha has declined to 120 bps. What's going on here?

The issue is that performance fees are paid on both alpha and beta. As beta returns increase, the investor pays a higher performance fee without a commensurate increase in alpha. The chart on the left below shows how the

percentage of alpha paid away rises from 47% to 80% as market returns rise from 0% to 20%. *All of this higher payout is due to higher performance fees.* The chart on the right looks at the same question from a different angle: how much alpha (before fees) does the manager need to generate to deliver 250 bps of alpha (after fees)? The more the market rises, the higher alpha needs to be. In an up 20% market, alpha must be over 750 bps in order for the investor to net 250 bps; here, over two thirds is paid away due to performance fees on beta.



IMPLICATIONS: WHY FEE REDUCTION IS THE PUREST FORM OF ALPHA

At multibillion dollar hedge funds, management fees have become a profit center – in many cases, a more important contributor to firm profits (and firm value) than performance fees. This represents an enormous transfer of wealth to the managers. The markets understand this. When analysts (or strategic investors) seek to value an alternative asset manager, profits derived from management fees are valued at roughly twice those of performance fees. Why? Because management fees are stable and are paid irrespective of whether the market and/or fund is up or down. Management fees are the pure “alpha” of the hedge fund management company.

Performance fees, while intuitively appealing to many investors, often do not result in a more equitable sharing of risk and reward. In the example above, we might be comfortable paying 80 bps of performance fees when the market returns zero and the fund has returned 6% gross, but it should give us pause that we pay away another 200 bps, now 80% of alpha, simply because the market rose 20%.¹ As investors, we bore that risk and its benefit should inure to us.

¹ From a technical perspective, the hedge fund manager has been given a free call option on the market that is equivalent to a one year European call option struck 4% in the money on notional equal to 10% of our investment in the fund. The present value of this one year option is between 80-100 bps. Investors hand this to the manager each January 1.

CONCLUSIONS

There are two obvious ways to make the hedge fund fee structure more equitable over time:

- Management fees should scale downward as fund AUMs increase. When management fees become a profit center at large funds, this results in a direct transfer of the most valuable portion of the return stream from investors to managers.
- Incentive fees should have a hurdle based on the appropriate measure of fund beta (or betas).

We have repeatedly made the point that “fee reduction is the purest form of alpha.” In practice this means that investors need to consider the idiosyncratic nature of a given hedge fund when deciding which type of fee reduction is likely to be most valuable over time. For a fund with high beta strategy (e.g., activist, event driven), the net benefit of a hurdle rate on performance fees might far exceed that of a modest reduction in management fees. For smaller funds, a higher management fee might be necessary to support operational stability and depth of research, but early investors might insist that this scales down as AUMs increase.

This begs the question, what is an equitable split between managers and investors for pure alpha generation? One extremely sophisticated family office recently offered that they were content paying away 40%, provided that it truly was for alpha and not a disguised form of beta. This seems like a rational starting point for an ongoing debate among investors and managers, and certainly is preferable to some of the adverse outcomes outlined above.