

Are You Getting Your Money's Worth? Sources of Hedge Fund Returns

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OVERVIEW

Hedge funds have been one of the hottest investment vehicles in recent years, with assets under management growing to a record \$2.25 trillion by the end of 2012 from \$488 billion in 2000, according to Hedge Fund Research.¹ Not only have institutional investors embraced this alternative investment, but even individual investors have jumped into hedge fund-of-funds products.

Despite the growing mainstream use of hedge funds, many areas of the industry were largely unregulated until recently and not required to disclose standardized performance information.² This makes accurate measurement of performance difficult. Additionally, hedge fund management fees are higher than those of most other investments. The median fee structure, according to the TASS database, is a 1.5% management fee plus a 20%

“incentive” fee. This means hedge fund managers are paid 20% of all returns above their target benchmark. Although the typical management fee for mutual funds may be in the same range as that of hedge funds, incentive fees are very rare in the mutual fund industry.

Given the questionable performance and high fees of hedge funds, it is worth asking whether investors are getting their money's worth.

This brief paper summarizes the findings of a 15-year study³ of hedge fund performance by Roger Ibbotson, Kevin Zhu, and me. The study sought to separate out the purported skill of fund managers from the returns the market would have provided anyway.

1. “Relative Value Arbitrage Leads Hedge Fund Capital to New Record,” (HFR press release, January 18, 2013) https://www.hedgefundresearch.com/pdf/pr_20130118.pdf. “Investors Return to Hedge Fund Industry as New Model,” (HFR press release, January 20, 2010).
2. US hedge funds are often exempt from many of the standard registration and reporting requirements. The Dodd-Frank Wall Street Reform Act was passed in 2010 in the US and, among other things, required advisors with more than \$150 million (USD) in assets to register with the SEC as investment advisors. Previous exemptions may no longer apply to many hedge fund advisors.
3. This summary is based on Peng Chen, Roger G. Ibbotson, and Kevin X. Zhu, “The ABCs of Hedge Funds: Alphas, Betas, and Costs,” *Financial Analysts Journal* 67, no. 1 (January 2011).

STUDY BACKGROUND AND SUMMARY

Numerous indexes and databases measure hedge fund returns, but they are subject to two main biases—“survivorship” and “backfill.” Both biases arise from the fact that hedge funds are not required to report their returns to a regulatory agency. Reporting is on a voluntary basis by fund managers.

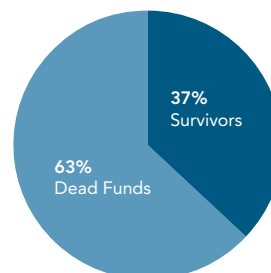
Survivorship bias is the tendency for a database to include only the returns of successful funds, skewing performance upward. Survivorship bias typically occurs when a dying fund stops reporting performance, which tends to be much lower than that of other funds, creating an upward bias. When a fund fails, it often is removed from a database, along with its performance history.

Backfill bias occurs because many hedge funds include previously unreported performances to data collectors when they first start reporting their returns. These backfilled returns tend to provide an upward bias to the overall return data, since typically only favorable early returns are reported. A few studies have attempted to estimate this instant history bias.

To adjust for the biases, we analyzed the performance of a universe of about 6,000 hedge funds in the TASS database from January 1995 to December 2009. This is an excellent database because dead funds are included, and backfilled data is marked. However, all the data is from self-reported databases, so an inherited upward performance bias is likely.

We first combined the live and dead funds, for a total of 13,383. Then we excluded funds that report in currencies other than US dollars and funds that report returns gross of fees. Of the remaining 8,565 funds, 2,396 were funds of funds, which we eliminated from this analysis, for a total of 6,169 funds. By the end of December 2009, 2,252 funds (or 37% of the original set) were still alive, and 3,917 funds (or 63% of the original set) were dead.

HEDGE FUND STUDY: 1995-2009 ADJUSTING FOR SURVIVORSHIP AND BACKFILL BIAS IN RETURNS

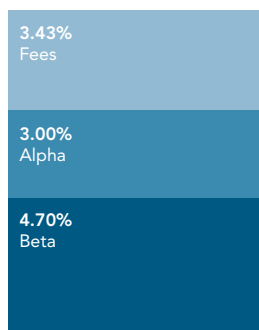


Our results indicate that both survivorship and backfill biases are potentially serious problems. Adjusting for these biases brings the net return from 14.88% to 7.70% for the equally weighted sample. Over the entire 15-year study period, this return is slightly lower than the S&P 500 return of 8.04%.

Now that we have realistic return figures, we can address the question of whether investors are getting their money's worth. The 7.70% return figure for hedge funds after correcting for bias and weighting can be broken down into two components—alpha and beta. Alpha is the amount of excess return that the manager adds, and beta is the return that the market adds. We found that roughly two-thirds of hedge fund historical return came from stock market beta and bond market beta (4.70%), and a little more than one-third of the 7.70% return was alpha (3.00%). Manager fees were estimated to average 3.43%.

While this measure of alpha is reliably different from zero, it's important to realize that the estimate is based on equally weighted hedge fund returns, and thus smaller funds might be driving the result. Smaller hedge funds tend to be younger, have shorter track records, and be subject to a greater degree of bias.

HEDGE FUND FEES AND RETURNS: 1995–2009



Net return is 7.70%; S&P 500 return for same period is 8.04% (after accounting for bias and weighting).

Source: Peng Chen, Roger G. Ibbotson, and Kevin X. Zhu, “The ABCs of Hedge Funds: Alphas, Betas, and Costs,” *Financial Analysts Journal* 67, no. 1 (January 2011).

Past performance is no guarantee of future results. It is not possible to invest directly in an index.

CONCLUSIONS

We sought to measure the sources of hedge fund returns. In particular, we have estimated what portion of the returns comes from alpha and what portion from beta. From this inquiry, a number of interesting findings emerged:

- First, despite their name, we found that more than 60% of the returns of hedge funds came from stock market beta. We also found that returns were strongly correlated with those of the overall stock market. Thus, investors hoping to use hedge funds as diversifiers may be disappointed. Proving this point, in 2008, hedge fund returns were down as much as 20%, which was highly correlated with the stock market.
- Second, we estimated that hedge fund fees were around 3.4% per year, far higher than those of most other investment vehicles. Much of this is due to hedge fund managers charging high incentive fees on the overall return (of which 60% came from stock market beta).

- Third, while from a historical perspective hedge funds in aggregate produced an alpha of around 3% on average, there was no easy way for investors to secure that “average.” It would have required investing in all 6,000-plus hedge funds over our sample period. In addition, we found more than 60% of all hedge funds tracked in the TASS database had already failed. For any investors, particularly individuals, this makes it extraordinarily difficult to benefit from this alpha.
- Fourth, while hedge funds during the 15-year period covered by the study generated slightly higher returns than traditional equity investments (as measured by the S&P 500), once fees were taken into account, the performance was lower than that of long-only equity portfolios. In other words, the higher returns generated by the hedge funds did not cover the additional fees they charged.
- Finally, the results presented here are only a reflection of historical returns. Hedge funds are relatively young investment options and very dynamic. We expect them to continue to evolve. A significant amount of money has flowed into hedge funds in the past several years, so we can’t be assured that the historical alpha we measured is good predictor of future alpha in the hedge fund industry. In fact, since we started the original research project in the early 2000s, the historical alpha estimates have been coming down as new return observations are added to the analysis. This dilution of alpha is expected to continue, as superior return opportunities get arbitrated away and the market becomes more efficient.

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