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HEDGE FUND RETURNS

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Abstract

Using a sample of hand-collected hedge fund data, we find that returns reported by managers to a commercial database are substantially greater on average than returns not reported - between 63 and 103 basis points of alpha a quarter. Funds that leave a database also perform substantially worse. These results have important implications for manager due-diligence, academic research, and risk management.

Discussion

Over the last decade, the hedge fund industry has become an increasingly important participant in the financial markets, managing over \$1.6 trillion in assets and accounting for over one third of equity trading volume in the United States.¹ One of the reasons for this growth is the apparent ability of hedge funds to deliver superior risk-adjusted performance for their investors. Many studies of hedge fund performance document significant alpha in hedge fund returns, with estimates ranging from 3%-5% annually.² How are hedge funds able to consistently deliver alpha in a competitive financial market?

Proponents of hedge funds argue that the lack of regulation, unique organizational features, compensation arrangements, and manager skill are the primary reasons for their superior track record.³ An alternative explanation, however, is that the empirical estimates of the risk and performance of hedge funds are overstated and come from biased data sources. Hedge funds are not required to report their returns to any regulatory body, yet some funds voluntarily disclose their performance to data vendors, likely as a means of attracting capital. Funds with poor performance have a strong incentive to withhold their returns from these databases. These commercial databases are the main source of fund returns and characteristics for both researchers and practitioners, so the quality of their data is crucial.

¹ BarclayHedge Report Q1 2010

² See Fung, Hsieh, Naik, and Ramadorai (2008), Ibbotson, Chen, Zhu (2011), Kosowskia, Naik, and Teo (2007), and Stulz (2007).

³ See Agarwal, Daniel, and Naik (2009), Bollen and Whaley (2010), Stulz (2007).

This *self-selection bias* is widely acknowledged, but the direction and economic magnitude of the bias is unknown. The traditional approach has been to argue that hedge fund databases are also missing the best funds, as these funds are likely closed to new investment and have little to gain from further advertising their performance.⁴ This line of reasoning suggests that the performance of good funds missing from the databases cancels out the missing performance of bad funds, leaving the resulting sample relatively unbiased. This argument is convenient (if not compelling), but due to data limitations, it lacks any empirical support.

Aiken, Clifford, and Ellis (2011) use a unique sample of hedge fund returns that have been calculated from hand-collected SEC filings. By matching these returns to two different commercial databases, we are able to split the sample into two groups: funds that report (or have reported) to a database and funds that never (or no longer) report. Our data captures the returns for 1,445 distinct hedge funds, yielding over 10,000 quarterly returns during the period 2004 through 2009.

We find that the bias in commercially available hedge fund data is severe. Funds that do *not* report their returns to commercial databases have significantly worse performance than funds that do. In our sample, the average return for a return found in a database is 1.85%, while the average return for those returns missing from a database is 0.74%.⁵ Using standard risk models, we find that returns in a database have an alpha estimate that is 0.63% to 1.03% greater than the returns not in a database.⁶ Thus, the managerial skill documented

⁴ See Fung and Hsieh (2009) for a discussion of hedge fund databases and the biases inherent in this data.}

⁵ This difference is significant at the 1% level.

⁶ These estimates are significant at the 1% level.

in previous studies is, in large part, an illusion. Rather than fund managers having ability to consistently outperform their benchmarks and deliver superior risk-adjusted returns on average, it is more likely that much of the previously documented skill of hedge fund managers can be explained by the upwardly biased return data employed by researchers.

We also identify 157 hedge funds that have delisted from the commercial databases, yet are still present in our data (i.e., they did not liquidate or have not done so yet). The returns for this group of funds allow us to address the size and nature of the delisting bias. The average return for funds *before* they leave the databases is 2.07%. After they leave, their returns shrink to an average of -0.04%. We also observe a similar drop in risk-adjusted performance for these “dead” funds.

Our results have important implications for hedge fund investors, the hedge fund industry, and financial market regulators. For example, investors using observed historical performance and risk metrics are likely to view hedge funds as a disproportionately attractive investment vehicle, leading to an inefficient allocation of capital. Also, if hedge fund managers are evaluated using peer performance measures calculated from database returns, even well-managed funds may appear to trail an upwardly-biased benchmark. Finally, using only self-reported data might lead regulatory bodies to underestimate future changes in hedge fund behavior that create financial instability.

Figure 1: Hedge Fund Return Comparisons

