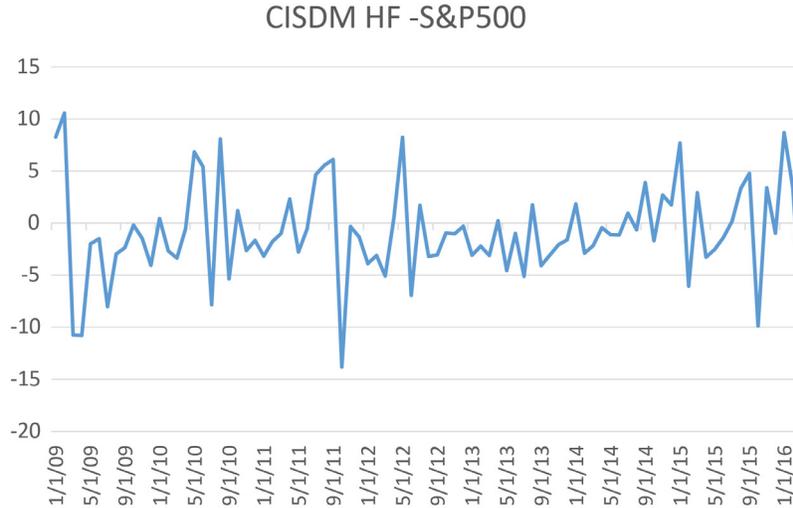


Editor's Letter

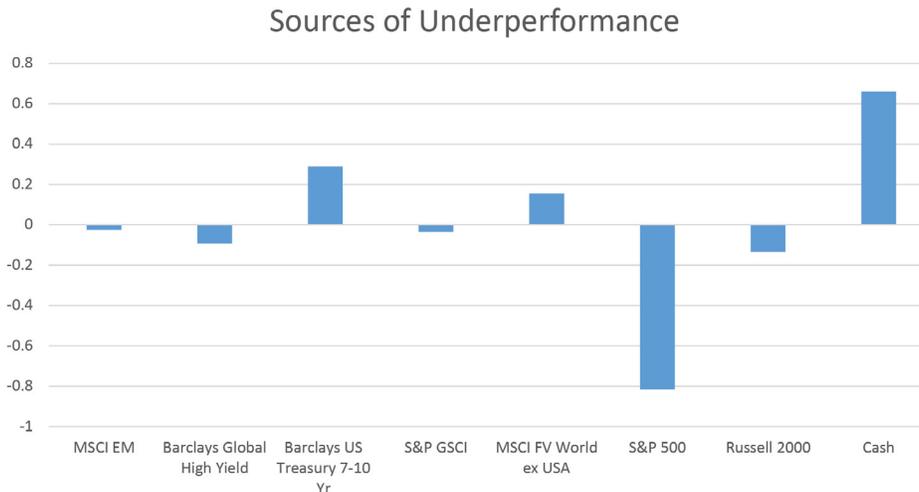
Why Have Hedge Funds Underperformed?

It is widely reported that hedge funds have performed poorly in recent months. The typical report focuses on broad indices of hedge funds such as CISDM or HFR hedge fund indices and uses the S&P 500 index as the benchmark. The following exhibit displays the performance of the CISDM Equally Weighted Index of all hedge funds that report to the CISDM/Morningstar database relative to that of S&P500 index.



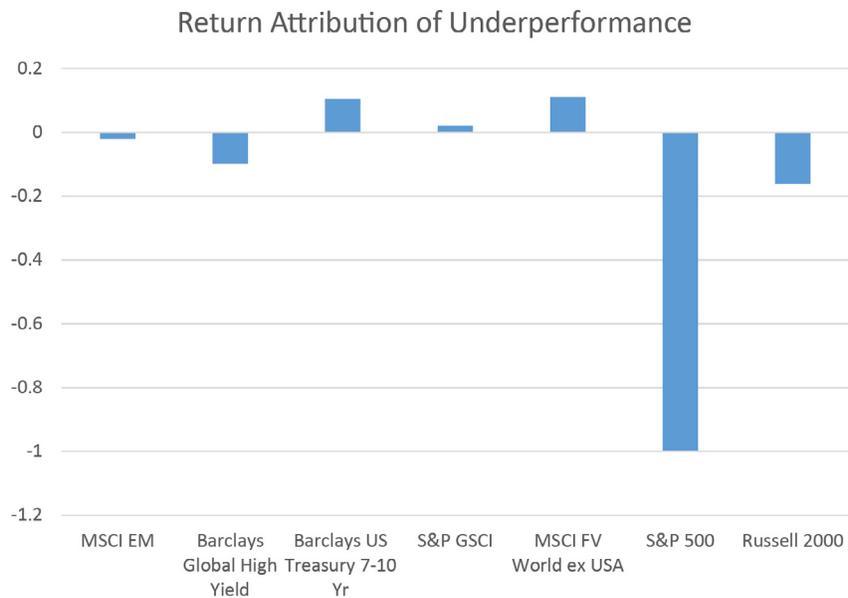
The CISDM index has underperformed the S&P500 index by an average amount of 0.87% per month since January 2009, the end of the financial crisis. During the same period, the monthly standard deviation of the CISDM Index return is about 53% of the monthly standard deviation of S&P500 Index's return. It is reassuring that the underperformance of hedge funds has come with lower risk. However, the degree of underperformance has been too much for some investors, as some institutional investors have recently announced that they are reducing their allocations to hedge funds. The question is why have hedge funds underperformed so badly since 2009?

First, we need to question whether the S&P500 is the correct benchmark for hedge funds. If the universe of assets that hedge funds invest in is different from the S&P 500 index, then it should not be surprising that hedge funds have performed differently than the S&P 500 index. Further, ignoring the fees, it follows that hedge funds have underperformed the S&P500 index because those parts of the investment universe not covered by the index have underperformed. Second, we need to find out about the degree to which hedge funds are invested outside the S&P 500 universe and the implications of these investments for their underperformance. To answer these questions, we use a 7-factor model. I regressed the underperformance against these seven factors to learn about the potential sources of underperformance. The following exhibit displays the result.



The R-squared of the regression is 78%, indicating that the above factors can explain 78% of the total variation in the underperformance of hedge funds. We can see that the most important contributing factor is that fact that hedge funds had low exposure to S&P 500 index, where hedge funds were 80% under-invested. Noting that the CISDM index covers most hedge fund strategies, with many of them operating in fixed income, real assets and currency markets, it is not surprising the CISDM index was not fully invested in S&P500 index. With hindsight, not being fully invested from January 2009 through March 2016 was a bad idea. On the other hand, being exposed to US Treasuries during this period was a good idea as they performed well (up 0.36% per month). However, next to under exposure to the S&P 500 index, the most important contributing factor to underperformance was the large cash positions held by hedge funds. Clearly, hedge funds remained cautious after the financial crisis.

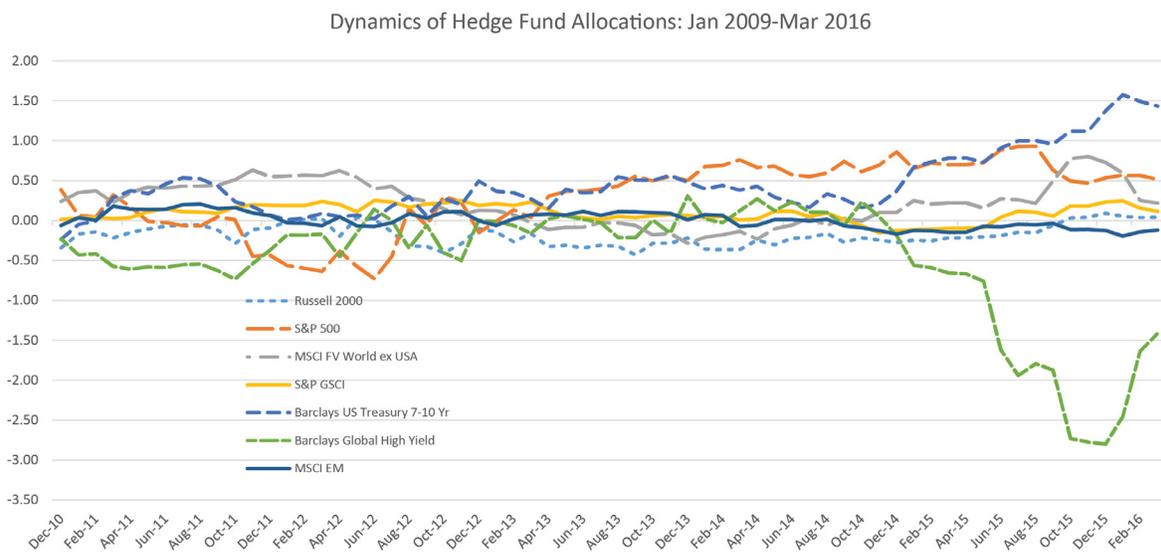
The following exhibit displays the costs and benefits of the long/short positions that are displayed in the above chart.



For example, the under exposure to S&P 500 index cost almost 1% per month in performance. The short position in commodities (S&P GSCI) contributed modestly to the performance (0.2% per month) as commodities declined during this period.

Since the R-squared of the above regression is not 100%, it means there are other sources of returns not captured by the regression. These sources made a positive contribution of 0.17% per month. If we assume that our seven factors cover all sources of systematic risks in the economy, then we may call the 0.17% monthly return alpha.

Next, it is useful to see whether hedge funds changed their asset allocations through the period considered in this note. The following chart displays the dynamics of hedge fund allocations:



We can see that right after the financial crisis and until mid-2012, hedge funds had zero to negative exposures to S&P 500 index. Then, from 2012 until recently, hedge funds increased their exposures to S&P 500 index. For instance, they were fully invested by August 2015. Further, since then hedge funds have substantially reduced their exposures to equities and high yield bonds while increasing their exposures to Treasuries. In other words, hedge funds were too slow to react to the bull market that started in 2009 and have been cautious since August 2015.

Do these results show that investors are correct in reducing their hedge fund allocations? The answer is, it depends. First, the S&P 500 is the wrong benchmark for hedge funds, even for equity-oriented strategies. Therefore, if an investor is determined to use the S&P500 index as a benchmark, it should have little or no allocation to hedge funds and only to equity-oriented hedge fund strategies. Second, the results reported above are for an index of hedge funds. Results not reported here is that the top quartile of hedge funds outperformed the S&P 500 index during this period. Therefore, if an investor has access to managers with a strong track record and the skills to select top quartile managers going forward, then it will be wise to allocate to hedge funds. Of course, this may mean that very large allocations to hedge funds will lead to diminishing returns since in some strategies the top quartile consists of a small group of managers.

Hossein Kazemi

Editor