Fundana
ASSET MANAGER

Between a Rock and a Hard Place

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For many Hedge Fund investors, finding the optimal portfolio weights across different Hedge Fund strategies seems to be their priority when constructing their allocation. What is the optimal weight for Equity Hedge vs Macro vs Event Driven vs Relative Value? In turn, manager selection comes second in terms of research focus and resource allocation. In a world of limited resources, is this the optimal approach? Is the added value of being skilled at strategy selection more important than the ability to systematically find the top managers? Investors often feel they are stuck between a rock and a hard place.

The purpose of this article is to quantify the performance benefit of being skilled at strategy selection versus being skilled at manager selection and to determine which of the two an investor should focus on.

How significant is the added value of being skilled at selecting the best strategies year after year?

To answer this question, we first quantify the maximum possible performance difference between: (i) a basic allocation strategy of equally weighting each strategy, achievable by any investor; and (ii) the best allocation strategy possible assuming an investor could know future strategy returns (Crystal Ball).

The Equally Weighted strategy simply gives an equal weight to all Hedge Fund strategies used: we label it the Bogey portfolio.

The Crystal Ball strategy is more advanced and theoretical, but it gives us an upper boundary on what could be achieved. Each year-end, we find the optimal set of strategy weights which will maximise the portfolio return based on the strategy returns over the next twelve months. We constrain the optimisation with a maximum weight of 25% per strategy and a minimum of 5%. We then simulate the portfolio returns using the actual returns for the next year based on these optimised strategy weights. At the end of the year, we perform another optimisation to find the set of new weights for the next year. The results are in Table 1.

We use the series of nine HFRI indices as strategy returns from 1991 to 2019. The indices are Macro Total, Macro Systematic Diversified, Equity Hedge, Equity Market Neutral, Distressed/Restructuring, Merger Arbitrage, Convertible Arbitrage, Multi-Strategy and Emerging Market.

Table 1
Two Initial Allocation Strategies

		Bogey Equal Wgt	Crystal Ball 12m
1991-2018			
	Yearly Return	8.6%	12.8%
	Volatility	*5.0%*	*5.5%*
Pre-Crisis 1991-2008			
	Yearly Return	10.3%	15.0%
	Volatility	*5.4%*	*5.8%*
Post-Crisis 2009-2018			
	Yearly Return	3.4%	5.3%
	Volatility	*4.0%*	*4.7%*

From 1991 until 2018, the Bogey strategy (i.e. Equal Weights) yielded a yearly return of 8.6% while the Crystal Ball strategy results in yearly returns of 12.8%. In other words, if an investor could have predicted each year the stratgey returns for the next year, he could have picked up 4.2% of extra performance (12.8% – 8.6%). Note that the extra returns did not come from a large increase in risk as volatility increased by just 0.5%.

It is also interesting to see the massive return difference between the pre-crisis period and the post-crisis one. Post crisis, the performance gain has halved to 1.9% (5.3% – 3.4%).

We then analyse an alternative allocation strategy hoping to improve on the Bogey strategy. We propose a "smarter" allocation which consists of extrapolating the previous years' strategy returns to be our best prediction of the next year's strategy return. At each year-end, we take the returns over the last year and use them as the best forecast of the following year's returns. At each year-end, we optimise the portfolio to find the set of optimal weights to give us the aximum expected return for the next year given our expected returns. We use the same weighting constraints as above (min. 5%, max. 25%). We then use this set of weights to calculate the portfolio performance over that year. The results are shown in Table 2.

Table 2
An Alternative Allocation Strategy

	Bogey Equal Wgt	Extrapolation 12m
1991–2018		
Yearly Return	8.6%	9.6%
Volatility	*5.0%*	*6.2%*
Pre-Crisis 1991–2008		
Yearly Return	10.3%	12.1%
Volatility	*5.4%*	*7.1%*
Post-Crisis 2009–2018		
Yearly Return	3.4%	3.9%
Volatility	*4.0%*	*3.9%*

From 1991 to 2018, the Extrapolation method generates an annualised return of 9.6%, which is a 1% pick-up in performance over the Bogey. It is interesting to note that this came at the cost of an increase of volatility as well.

Just like before, he results are dramatically different if one looks at the results post-crisis. Indeed, post-2008, the Extrapolation strategy produces much lower returns but still outperforms the Bogey by 0.5% (3.4% for the Bogey post-crisis vs. 3.9% for the Extrapolation strategy post-crisis).

The overall results are presented in Chart 1 below.

Chart 1
Overall Results
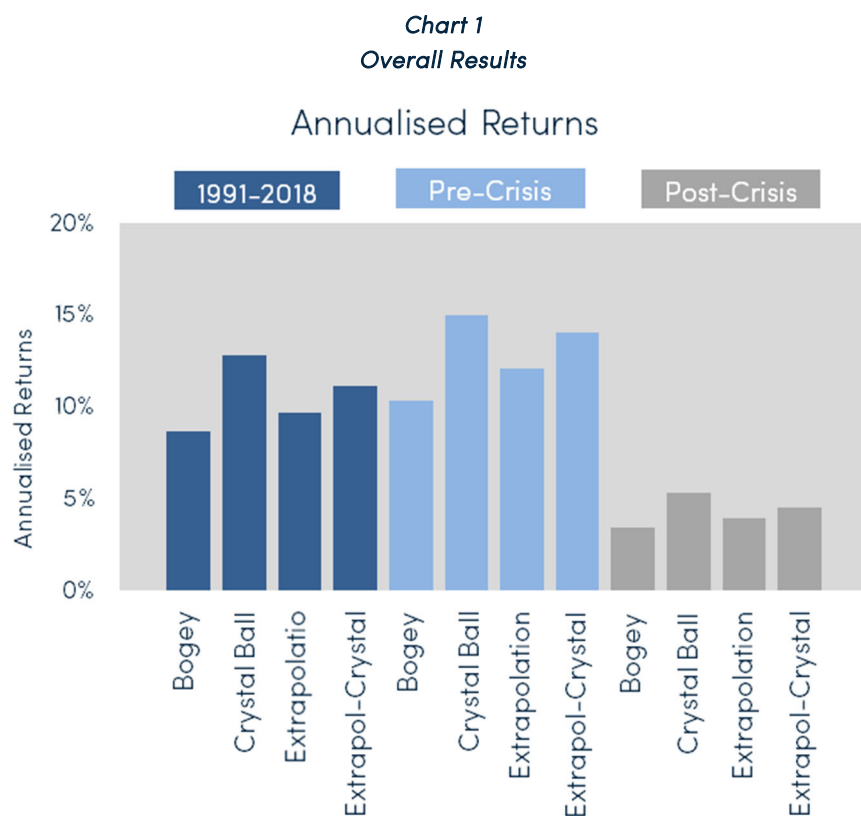
We then added a fourth strategy which we call "Extrapolation-Crystal". This time the strategy returns are derived using 70% of the Extrapolation returns and 30% of the Crystal Ball returns. Just like with the other strategy we optimise at each year-end to find the set of optimal strategy weights. Not surprisingly, the results are in-between the Extrapolation approach and the Crystal Ball.

To summarize all of the above, since the 2008 crisis a skilled investor could gain 1.9% per year if he chooses the right set of weights per strategy. Can you do better with manager selection?

Manager Selection

How critical is it to select the best managers in the Hedge Fund universe? It has been well publicised that with the industry maturing, all these managers end up doing the same thing with the same stocks or instruments – the so-called crowding effect. In a world where there are about 10,000 managers to choose from, is it worth spending a great deal of your resources on trying to find the very best managers versus an average manager? Indeed, many investors have experienced when investing in fixed income long-only products or equity funds, that there is not much performance difference between the best and the worst managers. Therefore, being very skilled at finding the best managers does not add much to performance for these asset classes. Does the same apply for Hedge Funds?

To gauge the difference between the best managers and the worst ones, we use a metric called manager performance dispersion. It is derived taking the performance difference between the top quartile and the bottom quartile of manager returns each year. For the purposes of this paper, we analyse the dispersion across all Hedge Funds strategies. This approach assumes that the investor has no skill in strategy selection but only in selecting funds whose average performance will match exactly that of top quartile (75th percentile) or bottom quartile (25th percentile) results. The same could be done using manager dispersion data at the strategy level. For each year, we rank manager returns from best to worst and split the series by quartile. The dispersion for a given year is simply the return difference between the top quartile and the bottom quartile.

The data we use comes from Morgan Stanley's database of Hedge Fund managers. It covers the period from 2008 to 2019 and includes about 800 managers across strategies and regions. The data covers only the funds prime brokered at Morgan Stanley. However, since this is a major prime broker in the industry, we do not consider this as a material bias.

The results are displayed in Chart 2. The dispersion varies between 9.7% and 28.5% and is on average 15.4%.

This means that on average there is a 15.4% difference between the best managers (top quartile) and the worst ones (bottom quartile). Said differently, a skilled investor at picking top quartile manager would outperform an investor who systematically picks bottom quartile managers by 15.4%. In addition, the results are consistent with intuition. During significant crisis, dispersion goes up. Notice how dispersion is much higher in 2008 and 2009.

Chart 2
Manager Dispersion All Funds per year
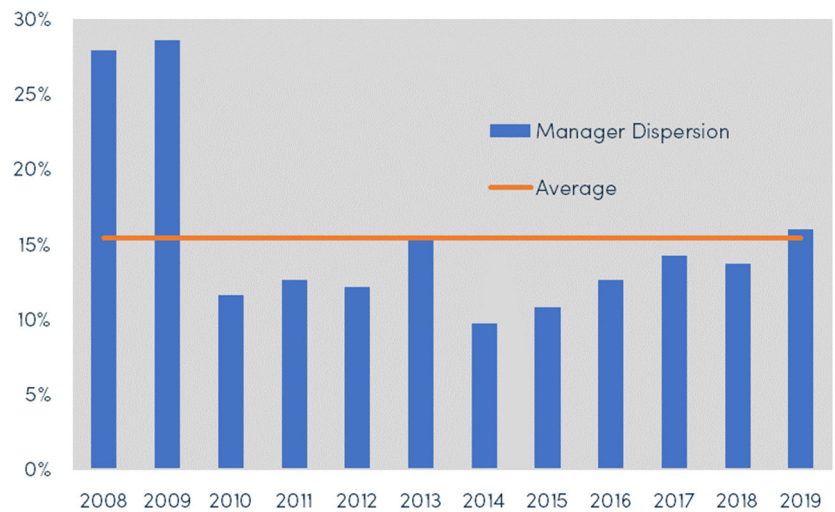
That kind of dispersion is very large. To put things in perspective, in the long-only world the dispersion for fixed income or equity funds is usually less than 5% using the same metric as above[2].

We now quantify how much performance increase manager selection can provide. We will assume that each year, an investor will select a certain percentage of top quartile managers, some from the middle 50% and the balance from the bottom quartile. Unlike the previous section, we cannot show results prior to the crisis since we do not have the data. The results are shown in Table 3 below.

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[2] See for examples, Yale's 2012 Endowment report p. 10 for more details or KKR's Rethinking Asset Allocation by Henry McVey Oct 2018, Exhibit 39.

Table 3
Manager Selection Skills 2008–2019

	Bogey	Crystal Ball	Smart	Not so Smart	Unlucky
Top Quartile	0%	100%	65%	10%	0%
Middle 50%	100%	0%	25%	15%	0%
Bottom Quartile	0%	0%	10%	75%	100%
Yearly Return	4.1%	12.2%	8.7%	−0.6%	−3.3%
Volatility	7.4%	9.2%	8.4%	8.6%	9.1%

The Bogey strategy this time assumes that the investor only picks average funds from the middle quartile. It also assumes that the returns are not skewed. Such skillset would have generated a 4.1% return per year. Next is the ultimate level of skill, again the Crystal Ball, which assumes that an investor can consistently pick managers from the top quartile. Note that we are not suggesting that this is possible, but rather we are interested in quantifying (just like with the strategy optimisation) how much performance increase there is between a medium skillset investor and an investor with a Crystal Ball. This time, the Crystal Ball level would produce a yearly return of 12.2% or an 8.1% potential performance gain versus the Bogey. This is much higher than with strategy selection which was only 1.9% post-crisis.

Note that the Crystal Ball strategy understates the actual performance since we assume here that the returns would come exactly from the 75th percentile rather than within the 75th to 100th percentile. Similarly, the same is true for the unlucky investor where returns are assumed to come exactly from the 25th percentile rather than between 0 and the 25th percentile.

We now look to see if we can improve from the Bogey and try to capture some of this 8.1%. Given the dispersion data format, it is not possible to design a quantitative manager selection strategy. Rather, we look at some hypothetical scenarios in terms of an investor's ability to pick good or bad managers.

The first one is the "smart" investor who, over time, manages to have in his portfolio 75% of his managers which constantly come from the top quartile. The rest is split as follows: 15% coming

from the middle quartile and the last 10% from the bottom quartile. This is not uncommon for good Fund of Hedge Fund managers with a long track record. That investor would generate an annualised return of 9.5%. This is a 5.4% gain from the Bogey and more than double the 1.9% potential increase with strategy selection.

The other two investors are "not so smart" with most of his manager picks coming from the bottom quartile, while the "unlucky" investor ended up picking only the worst managers. The impact of bad manager selection is obvious: there is almost a 9% annualised difference between the "smart" investor and the "not so smart"!

Chart 3 below summarizes for Strategy Selection and Manager Selection the different approaches' outperformance versus their respective Bogey *only post-crisis*.

Chart 3
Outperformance vs Bogey 2008-2018
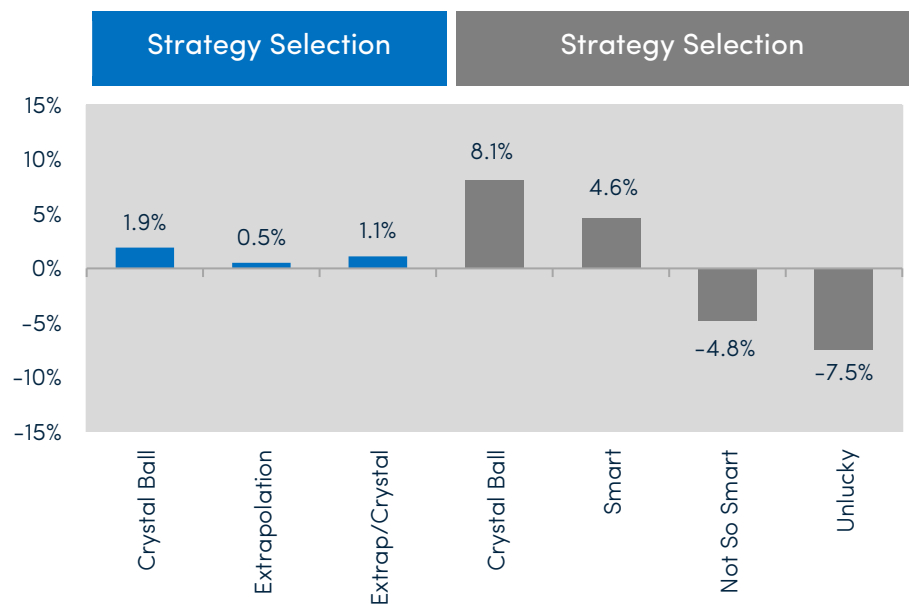
Conclusion

The results above show that, post-crisis, there is only a 1.9% potential increase of performance in selecting the best strategies. This is in sharp contrast to the 8.1% gain you can achieve with manager selection.

Post-crisis, a "smart" strategy selection approach such as Extrapolation does better by just 0.5% compared to the Bogey (i.e. Equally Weighted) allocation method. On the other hand, a "smart" manager selector would provide an extra 5.4% of performance versus the Bogey (100% of managers coming from middle quartile).

This has important implications for investors with limited resources. To start, they should focus on manager selection and use a naïve approach to strategy weights. They should not underestimate the importance of manager selection since manager dispersion tends to be relatively high with an average of 15.4% and even higher during significant crisis periods. Finally, manager selection should be the result of a disciplined process in order to avoid picking the worst managers and try to maximise the allocation to those in the top quartile.

About Fundana

Fundana was founded 27 years ago to advise one of the largest Swiss banks on their Hedge Fund allocation.

Fundana is a boutique and wants to remain one. It is not aiming to manage $5Bn with 50 people in the future by capturing fads. The focus is not on products but on performance and risk management. It is recognized by industry peers as a specialist and aims to find clients which need its expertise.

Clients include Family Offices, Independent Asset Managers, Pension Funds and Banks as well as Fundana's employees and partners.

The firm, regulated by FINMA, is based in Geneva, with 15 professionals and manages about $1Bn of Assets.

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