

“I’ve been thinking about...what to do about hedge funds”

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The performance of hedge funds over the last six months has not been surprising, in our view. Currency hedging effects lift the return to about 3.5%. Lacklustre performance of global equity and credit markets has reduced the market beta “free kick” for hedge funds, additionally the choppy nature of these markets has inhibited ability to produce alpha (we will discuss this further later). To understand this return, the investor needs to appreciate how a hedge fund is constructed.

What is a hedge fund anyway?

Hedge funds are built on the same principal components (DNA) as all financial products. Hedge funds, like all financial products, can be viewed as a collection of market exposure biases and active return strategies. Once put into this framework it becomes much easier to understand the performance profile of hedge funds and how to use them effectively within diversified portfolios. If one thinks of hedge funds as absolute return products it all becomes much more difficult...

Previously¹, we have presented an underlying logic for why hedge funds exist. This is worth revisiting. Do you believe that:

1. Markets are not perfectly efficient?
2. Active management can produce excess returns to those generated by the market?
3. By increasing flexibility and removing constraints, skilled managers have the potential to produce greater levels of active returns?

If your answers to (1) and (2) are “yes” then you should consider actively managed products, otherwise you should use only index funds. However, (3) is the next extension, suggesting that benchmarks and other constraints restrict managers’ opportunities. If you agree then hedge funds should be further investigated. The underlying principle of hedge funds is that a greater amount of flexibility increases the potential for active returns in inefficient markets - including more active use of leverage, derivatives and short selling, while an index agnostic approach also removes a key constraint.

This is not a statement that all hedge fund managers will generate active returns. Just like traditional managers, not all hedge fund managers have an investment edge.

The absolute return myth

The potential of hedge funds is regularly misunderstood because many people call hedge funds “absolute return funds”. The term “absolute returns” is a myth. The best definition of an absolute return is a very high likelihood of achieving a certain level of return regardless of the market environment. The only financial instruments which provide absolute returns are fixed interest term deposits. With the investment universe of hedge funds identical to traditional

funds, it is misleading to label hedge funds “absolute return funds”. Increased flexibility does aid alpha opportunities, whilst underlying market beta does exist and cannot be avoided within hedge funds. The challenge for the investor is to understand this to enable them to more readily appraise performance.

All investment products are a combination of market exposures and active return exposures (Figure 1). Market exposures are familiar, and common to both traditional products and hedge fund products. The net sum of market exposures will always be 100%. It is a simple accounting fact that market exposure cannot be created or destroyed, i.e. if the investor gives a manager \$1 they must invest \$1 net, not \$1.50 or \$0.80.

Figure 1: Market and active return exposures

| Market exposures | Active return exposures |
|--------------------------|--------------------------------|
| 1. cash returns | 1. Alpha – security selection |
| 2. Credit market returns | 2. Alpha – security mispricing |
| 3. Equity market returns | 3. Market timing |

Source: Colonial First State

For single market traditional products, there is usually only one market exposure, and for multi-sector traditional products, a range (all positive). Hedge funds are a little more complex as they frequently involve techniques such as short-selling, leverage and the use of derivatives, e.g. a fund that is 200% exposed to equities is leveraged and is short cash (-100% exposed to cash). The exposures still net to 100%. Figure 2 explains likely market and active return exposures for a range of hedge fund strategies.

Figure 2: Exposures of various hedge fund strategies

| HEDGE FUND STRATEGY | MARKET EXPOSURES | | | ACTIVE RETURN EXPOSURES | | | COMMENT |
|--|------------------|-----------------------|-----------------------|----------------------------|------------------------------|---------------|---|
| | CASH RETURNS | CREDIT MARKET RETURNS | EQUITY MARKET RETURNS | ALPHA – SECURITY SELECTION | ALPHA – SECURITY MIS-PRICING | MARKET TIMING | |
| Long/Short Equity | ✓ | | ✓ | ✓ | | ✓ | Bias could be long or short. |
| Market Neutral Equity | ✓ | | | ✓ | | | Includes market neutral equity and statistical arbitrage. |
| Convertible Arbitrage | ✓ | ✓ | | ✓ | ✓ | | Many managers do not hedge their credit risk – so there is a residual credit market exposure. |
| Merger Arbitrage | ✓ | | | | ✓ | | |
| Fixed Interest – Credit Strategies | ✓ | ✓ | | ✓ | | ✓ | Includes high yield, distressed debt and emerging markets debt managers. |
| Fixed Interest – Relative Value Strategies | ✓ | | | | ✓ | | Includes fixed income arbitrage and mortgage-backed securities (MBS). |
| Tactical strategies | ✓ | | | | | ✓ | Includes macro managers and commodity tracking advisers (CTAs) or registered futures traders. |

Source: Colonial First State

There are some significant implications that come from understanding and accepting a philosophy like this:

1. One can gauge whether a manager is adding value or not (ie. Positive active returns)
2. One can now work out how hedge funds better fit in a portfolio

The investment outcome of a fund of hedge funds

A fund-of-funds (FoF) will tend to have relatively consistent market exposures because it is a diversified exposure to the biases of the underlying managers, which in aggregate changes little over time. The biases will vary a little more if the FoF manager tactically allocates between different hedge fund strategies.

As a case study, assume a FoF is expected to have market exposure biases of:

- 5% high yield credit
- 15% global equity
- 80% cash

The next question is what level of active returns is achievable? If hedge funds are all about active returns then this becomes the key question. It is important to be realistic. Active returns are hard to find in a competitive market. Hedge fund managers have some structural advantages over traditional managers which may assist them if they use this properly. But there is now a huge amount of capital flowing into the hedge fund industry which further increases the competition for active returns.

Given the diversification of a FoF targets, our opinion is that a good result is 2% active return after fees and a very good result for the investor is a 4% active return after fees.

This may or may not sound exciting. It is exciting compared to the active returns that have been achieved in traditional products such as Australian fixed interest and global shares (though reasonable levels of active returns have been achieved in Australian equities). It is also attractive when the low volatility of FoF performance is taken into account. However it is not consistent with the hype that some associate with the hedge funds industry.

So now, armed with an understanding of market biases and active return expectations, we can consider what would be deemed very good performance for a FoF in different environments.

Figure 3: “Very good” performance outcomes in different market environments of our case study FoF

| | | Global Equity Market Returns | | | | | | | |
|---------------------------|------|------------------------------|------|------|------|-------|-------|-------|-------|
| | | -15% | -10% | -5% | 0% | 5% | 10% | 15% | 20% |
| Global High Yield Returns | -15% | 5.8% | 6.6% | 7.3% | 8.1% | 8.8% | 9.6% | 10.3% | 11.1% |
| | -10% | 6.1% | 6.8% | 7.6% | 8.3% | 9.1% | 9.8% | 10.6% | 11.3% |
| | -5% | 6.3% | 7.1% | 7.8% | 8.6% | 9.3% | 10.1% | 10.8% | 11.6% |
| | 0% | 6.6% | 7.3% | 8.1% | 8.8% | 9.6% | 10.3% | 11.1% | 11.8% |
| | 5% | 6.8% | 7.6% | 8.3% | 9.1% | 9.8% | 10.6% | 11.3% | 12.1% |
| | 10% | 7.1% | 7.8% | 8.6% | 9.3% | 10.1% | 10.8% | 11.6% | 12.3% |
| | 15% | 7.3% | 8.1% | 8.8% | 9.6% | 10.3% | 11.1% | 11.8% | 12.6% |
| | 20% | 7.6% | 8.3% | 9.1% | 9.8% | 10.6% | 11.3% | 12.1% | 12.8% |

Source: Colonial First State

The important thing to note is that each number in the matrix represents very good performance in that particular market environment². One can now see the impact that the market environment can have on FoF returns. It also highlights the problems with the concept of “absolute returns”; if the concept was true then the number in each cell of the matrix would be the same.

The example above assumes “very good” active return performance. The actual level of active returns generated will vary, indeed sometimes will be negative. It is important to understand the different styles of active returns (these have been explained in our prior paper³) and to recognise the difficult environments for generating active returns. Some examples are provided below:

1. Alpha – Security Selection

There are many different types of security selection styles across both equity and credit markets. Fundamental equity stock picking will struggle when the market is sensitive to macro announcements (eg. Interest rate rises) rather than company specifics.

2. Alpha – Security Mispricing

Security mispricing strategies will often struggle when liquidity premiums are expanding (when more people are demanding liquid assets). Mispricings are often a function of liquidity and the hedge fund may provide that liquidity and receive a premium.

3. Market Timing

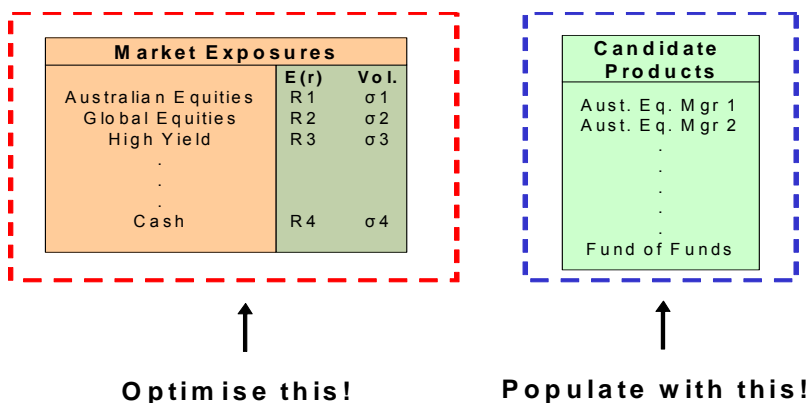
There are different styles of market timing. Technical managers look for trends and patterns in markets. These managers will often struggle in choppy, directionless market environments. Fundamental managers focus on macroeconomics. They may struggle when markets are driven by momentum rather than fundamentals.

If we applied a similar matrix style analysis to the 6 months to 30 June 2006, our FoF case study market exposures would have produced a return of 3.09%. Over this timeframe, the HFRX Index produced a currency hedged return of approximately 3.50% so whilst the level of total performance is relatively modest (albeit over a very short timeframe) these results are hardly surprising – actually it suggests that in a difficult environment the hedge fund industry has still managed to generate active returns this year!

Portfolio construction using hedge funds

With all this necessary background information, how is the best way to incorporate hedge funds into a diversified investment portfolio? Classical portfolio construction techniques tend to focus on asset class allocations and do not incorporate active return potential. This could be described as an “optimise then populate” approach – the asset allocation is determined and then populated with products (Figure 4). Active returns are an important source of return and risk and need to be incorporated into the portfolio construction decision.

Figure 4: An optimize then populate approach to portfolio construction with hedge funds

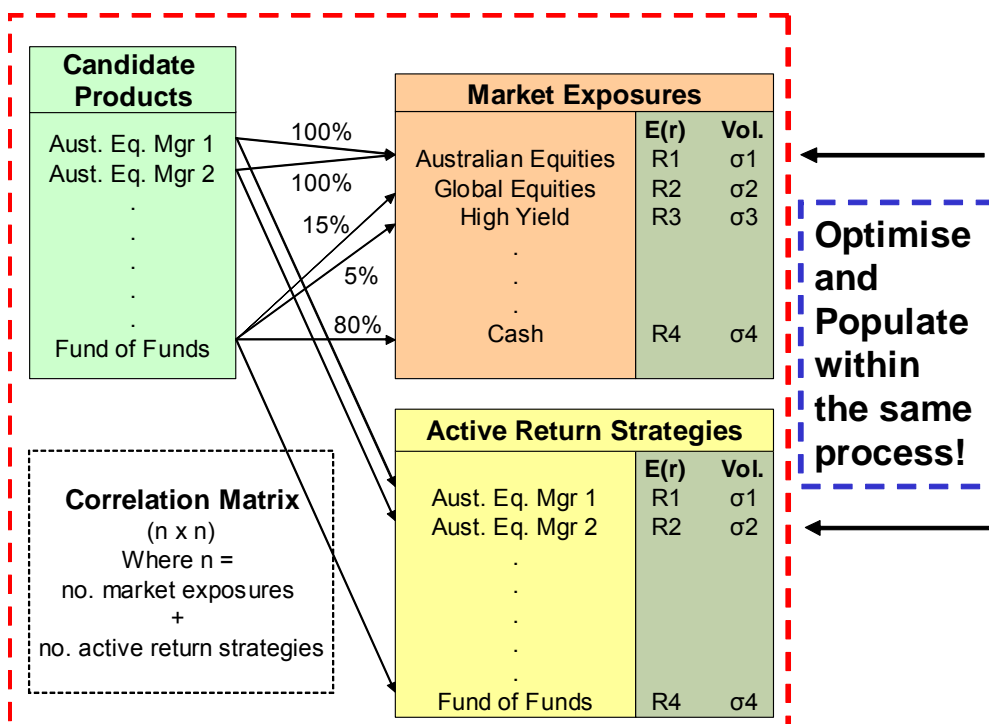


Source: Colonial First State

The problem with this is the portfolio construction or strategic asset allocation (SAA) is based on collecting market exposures whereas actual implementation of the SAA creates both market exposures and alpha outcomes. As above the alpha outcomes are an important contributor to risk and return and thus need to be considered in a more robust manner.

With this in mind, an alternative approach to portfolio construction would be a “product allocation” approach. This incorporates the active risk and return profile of each product into the allocation decision. This is presented in Figure 5.

Figure 5: A product allocation approach to portfolio construction



Source: Colonial First State

In practice, this approach is often too complex for the majority of retail client portfolios. A compromise is to group the portfolio into defensive and growth investment opportunities and compare the risk and returns.

Given the market exposure profile of the case study FoF used in this paper (5% high yield credit, 15% global equities and 80% cash), it is appropriate to compare this against other defensive investment opportunities, such as cash, bonds, mortgages and diversified credit. To compare each the following questions should be asked:

1. What is the underlying asset class income of the opportunity?
2. What are the risks associated with the underlying market exposures?
3. What is the potential level of active returns?
4. What risks are associated with the active return exposure?

Analysed in a framework like this, a diversified FoF is an attractive investment because the active return profile is larger than what is available in traditional defensive asset classes. As the

active return opportunity is larger, and alpha is lowly correlated with returns of asset classes this is a very valuable diversifier for portfolios.

The key proviso is recognising that a FoF will typically offer less liquidity than traditional defensive asset classes. This needs to be taken into account with respect to each client's unique liquidity requirements.

The same framework can be applied to incorporating individual hedge funds in a portfolio. That framework entails:

1. Understand the market exposure biases
2. Understand the active return style, risk and potential
3. Determine whether this fits in the defensive or growth portion of a portfolio (are the underlying market biases growth or defensive)
4. Assess whether the active return opportunity is greater in the hedge fund compared to other opportunities available.

This framework is interesting as the result could be that different hedge fund managers belong in different parts of the portfolio.

There is greater selection risk in taking a single manager approach. What may appear an exciting strategy may actually be well behind peers. A FoF team will have specialists who know their peer space very well. They should also be able to identify and assess the key sources of risk very well. For this reason, we encourage advisors to use a FoF approach rather than individual hedge funds, particular when they are seeking diversification benefits rather than exposure to particular asset classes.

Summary

The emphasis of this paper is that understanding the market exposure biases and active return exposures of a hedge fund is a key starting point to understanding hedge funds. Hedge funds are not "absolute return" products. This approach helps one understand hedge funds better and also makes it easier to see how they can be effectively used in a diversified portfolio of investments. Using this approach also makes one realise that returns year-to-date are nothing out of the ordinary.

Endnotes

1. Bell, D., (2004), "Inside a fund of hedge funds portfolio", *PortfolioConstruction Journal*, Autumn
2. Once could take 2% off each number in the matrix and consider each outcome a "good" result.
3. Bell, D., (2004), "Inside a fund of hedge funds portfolio", *PortfolioConstruction Journal*, Autumn