

Portable Alpha or Alpha Transport Strategies

Portable alpha can help institutional investors generate outperformance in asset classes where it may be otherwise difficult to add value through active management.

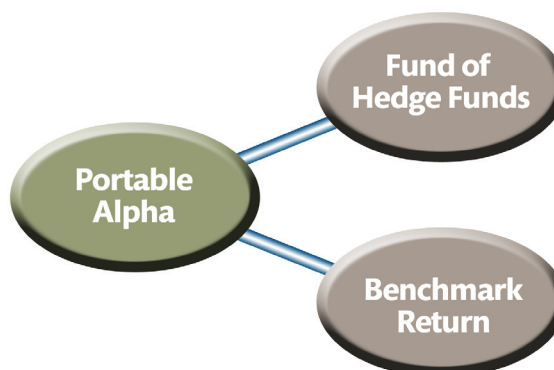
The institutional investment community has employed portable alpha strategies since the 1980s, however, the strategy has achieved unprecedented acceptance and exposure in recent years. Portable alpha investment management strategies are designed to (i) separate the skill-based return (“alpha”) generated by an investment strategy from market risk (“beta”); and (ii) add this alpha to a targeted benchmark or index return to create an improved overall risk adjusted return performance.

Nuts & Bolts

One of the primary performance evaluation criteria by which institutional investors are judged is their investment management returns, relative to a benchmark. The benchmark return is typically a weighted average of a number of domestic and international market indices across a spectrum of asset and product classes including: fixed income, equities, real estate, commodities, hedge funds, infrastructure, private equity and currency markets.

The capital asset pricing model states that the expected return of an actively managed investment portfolio is the sum of the risk free rate of interest plus a market-related risk premium (beta), plus or minus a skill-based return (alpha).

Derivatives allow the institutional investor to deconstruct returns into their alpha, beta and risk-free rate components and then reassemble them in a different manner. The key benefit to this process is the ability to *transport* the alpha component from the original strategy to another strategy. When institutional investors can successfully identify and allocate to investment managers who are able to consistently generate alpha, they can combine their skill based returns with a synthetically generated index return, in order to outperform the index or specific benchmark return target. When this is successfully done across multiple indices, the institutional investor is able to improve the total return of their portfolio and this results in a return that exceeds the benchmark they are being measured against.



The Alpha Engine – Fund of Hedge Funds

Portable alpha strategies start with the selection of the “alpha engine”. While any actively managed investment management strategy can form the basis for alpha transport, one of the more commonly used alpha engines is a diversified portfolio of hedge funds. This portfolio can be a single hedge fund, a fund of funds created “in-house”, or a fund offering from a third party specialist fund of funds manager. There are several compelling reasons for using funds of funds.

A fund of funds employs many hedge fund strategies across multiple individual hedge fund investments to generate returns with low correlation to each other and to the market. These returns can be enhanced by the use of tools not always available to long only investment managers such as leverage, shorting strategies and illiquid investments that provide potentially attractive investment opportunities. Target returns for fund of funds are typically the risk-free rate of return plus several hundred basis points of alpha after all fees, e.g. LIBOR + 300 bps.

The Beta Component - Target Benchmark

The next step in creating a Portable Alpha Strategy is selecting the target benchmark return for the beta component. The benchmark return is representative of the performance measurement for the institution’s portfolio, or a part of the portfolio, and is typically an equity or fixed income index. Typical benchmark returns are liquid indices such as the S&P 500, Nasdaq 100, Lehman Aggregate Bond Index. While virtually any liquid index can be used for a Portable Alpha structure, typically the largest and most liquid indexes are used to save costs unless the desired benchmark is extremely specialized and requires a highly customized solution.

Financial institutions (“FIs”) make derivative markets in a variety of equity and fixed income indices. Access to these benchmark returns or indices is achieved through the use of futures, options and swaps.

Putting it all Together – The Structure

Portable alpha strategies are generally executed by sourcing the beta exposure through either total return swaps (TRS) or futures. The relative merits of swaps and futures are summarized in *Table 1* on page 3.

The cost of these derivatives – swaps and futures contracts – is determined by the cost to the FI of carrying the underlying position. Carrying cost for financial assets is made up of the financing charge for acquiring the underlying index position in the cash market, compensation for counterparty risk and FI profit as well as a positive or negative adjustment for the expenses related to tax. The largest and most liquid indices such as S&P 500 can typically be acquired at a very low spread above LIBOR (the London InterBank Offered Rate which is a proxy for the risk-free rate of interest), normally in the 10-20 bps range. However, the cost of carry charges of these strategies begins to rise as one moves to less liquid markets where supply and demand volumes are lower and consequently inconsistencies in pricing occur.

Example:

Objective: combine a direct investment in a fund of hedge funds with a synthetic investment in S&P 500 to earn a return above the equity index.

Investment Returns:

Fund of Funds return (net of fees)	LIBOR + 300 bps
Swap return	S&P 500
Swap cost	(LIBOR + 15 bps)
Net return	<u>S&P 500 + 285 bps</u>



	SWAPS	FUTURES
Terms	Customized as to size, dates	Standardized as to size, dates
Documentation	ISDA documentation more time-consuming and complex than futures, requiring legal advice. Negotiated.	Relatively brief, straightforward and inexpensive to implement. Standardized.
Security	Typically secured by a charge over the alpha-generating assets, but may be unsecured for strong credits.	Posting of margin is required.
Credit Risk	Involves taking FI credit exposure regarding ability to honour its obligation to pay amounts owed in future.	Futures clearing corporation pools the risk of all participants and guarantees payment when due, backed by margin deposits of all participants.
Contract Settlement	Typically cash, with option to physically settle.	Obligation to accept or deliver underlying assets, but typically cash settled with offsetting trade.
Ongoing Administration	Minimal management required during term of contract (typically one year).	Need to manage margin account and rollover of futures contracts.
Beta Choices	Unlimited – if it can be bought and sold (i.e. FI can hedge its position), it can be swapped.	Limited to traded futures contracts (e.g. one equity index contract and 2 government bond contracts traded in Canada).
Price	Typically contractually fixed of at least one year. Over the counter contracts with price privately negotiated.	Varies depending on whether futures are trading cheap or expensive. Quoted prices on a public exchange.

Table 1 - The relative merits of swaps and futures

Implementation

STEP 1:

Invest 90% of the cash in a fund of funds portfolio for a LIBOR + 300 bps return.

STEP 2:

Buy Index futures with the remaining 10% cash for a return on the target benchmark from a FI.

Or

Enter into a TRS with a FI– swap out the target benchmark return for the cost of the Index (LIBOR + 15 bps)

This simplistic example does not address a number of costs and risks associated with managing a portable alpha strategy. These include:

- research and due diligence costs associated with selection of individual hedge funds or fund of funds;
- legal fees and time to negotiate documentation with the FI;
- credit risk regarding the FI’s ability to pay its swap obligations when due;

- managing of the futures rollovers and posting of collateral with the futures clearing corporation;
- ongoing management and risk reporting of the strategy; and
- managing currency risk.

Constraints to be considered include:

- the liquidity of the underlying index;
- capacity/scalability of the underlying alpha engine; and
- capacity of the FI(s) to extend credit for derivative transactions to the institutional investor.

The standard deviation of the fund of funds returns also needs to be considered in evaluating the probability that the overall strategy will provide a positive return.

The foregoing example is based on one asset and one index. The next level in use of alpha transport is to employ multiple actively managed investments and multiple index exposures achieved synthetically via swaps and futures. The objective is to generate returns above multiple indices, resulting in returns above the institutional investor’s benchmark return.

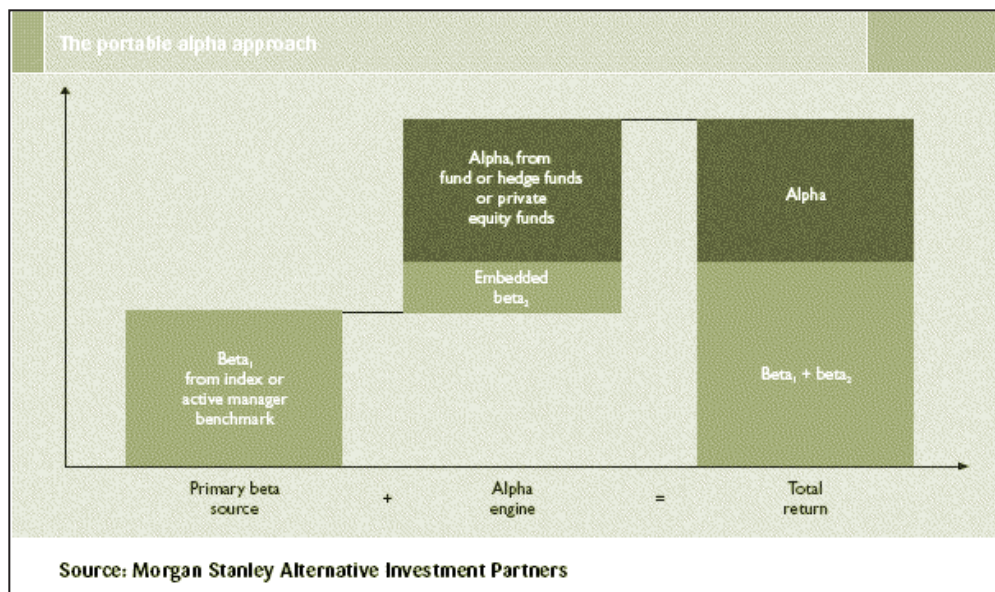


Chart 1 - The portable alpha approach



The costs and complexity involved in managing a portable alpha strategy across a portfolio can be significant however, the benefits include:

- Enhanced portfolio returns – objective is “index plus”
- Greater consistency of returns – a fund of funds offers a diversified portfolio of alpha sources across multiple managers and strategies reducing reliance on individual manager skill. Alpha is stripped out and added to an index return.
- More effective risk management – low correlation of returns across multiple strategies and higher expected return per unit of risk
- More effective asset/liability matching – expanding the investment universe can free managers to access alpha in alternative asset classes while still maintaining a policy asset mix in line with their benchmark.

Conclusion

One of the advantages of portable alpha is the potential for institutional investors to generate outperformance in asset classes where it may be otherwise difficult to add value through active management. Portable alpha is a theoretically sound means of achieving returns that exceed an institutional investor’s benchmark. The success of the strategy is primarily dependent on the successful identification of sources of alpha and transporting these skill-based returns on top of the index returns acquired synthetically at low cost. While the derivative costs are typically negligible, there is a great deal of effort and time required to find the appropriate managers, negotiate the contract terms and complete the necessary documentation. Furthermore, portable alpha strategies require ongoing monitoring to ensure that the managed assets are being employed profitably and that improved risk-adjusted returns are the end result of the process.