The Clifton Group
Investment Management Company

The Evolution of Alpha Transport Strategies into Fixed-Income

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Introduction

In recent years, institutional investors have become increasingly frustrated by the inability of many traditional active managers to outperform their benchmarks. In response to this, they have begun to consider alpha transport strategies. With the flood of assets into absolute return strategies, the movement towards alpha transport has accelerated.

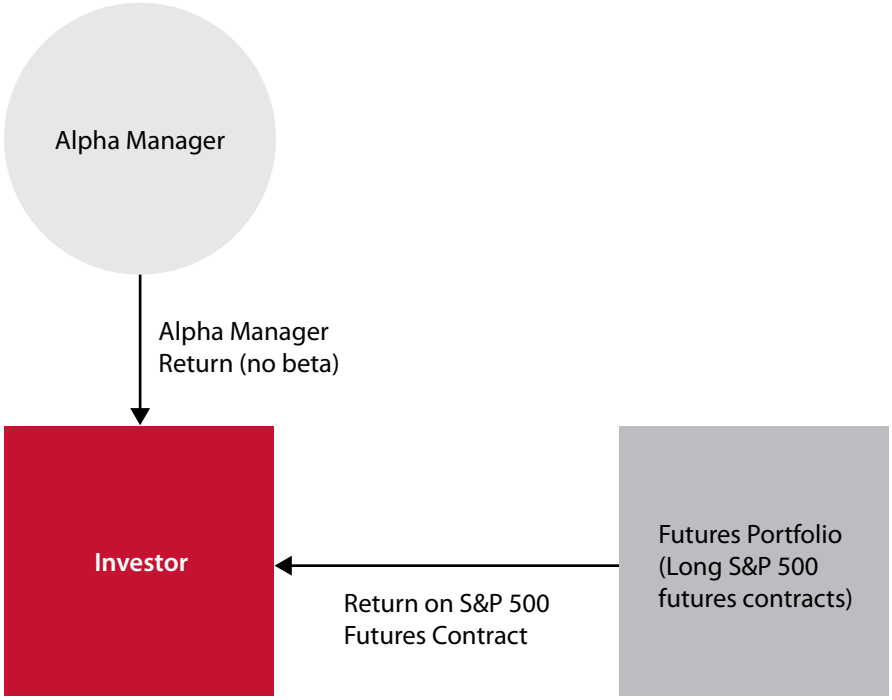
For the most part, the focus of alpha transport strategies has been directed towards large-cap domestic equities, as this was considered the most efficient market and thus the one where managers struggled most to outperform benchmarks like the S&P 500. Fixed-income was not usually looked to as a candidate for alpha transport, primarily because most common fixed income benchmarks are difficult to replicate synthetically; as we will see shortly, this a necessary attribute for alpha transport programs.

The purpose of this article is to demonstrate why alpha transport can be a viable option for the fixed-income allocation of most funds and to highlight recent market developments that may make this process easier than ever before.

Fundamentals of Alpha Transport

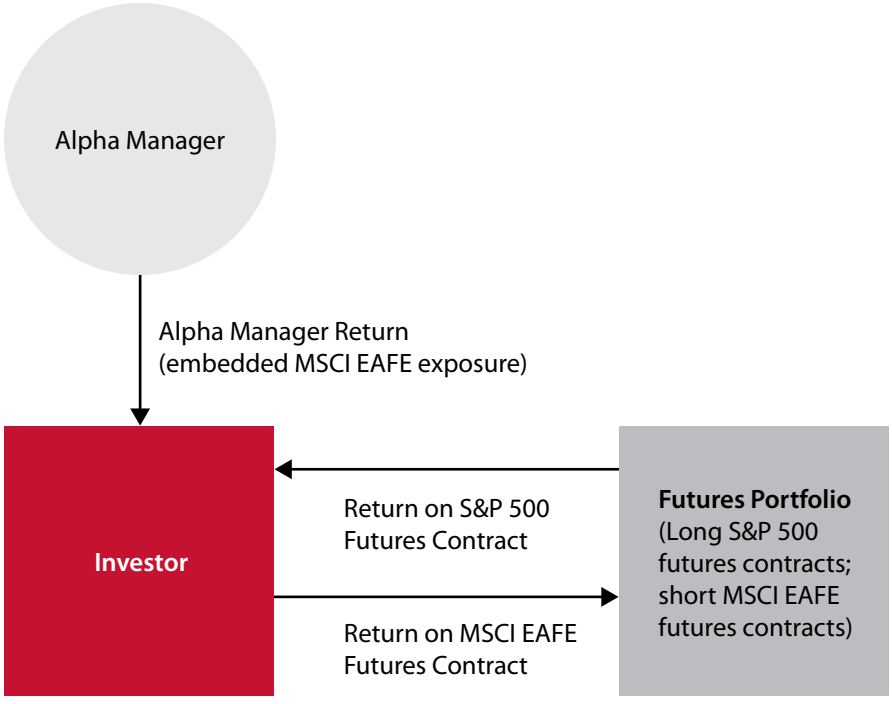
To understand the building blocks of alpha transport it is necessary to clearly define alpha and beta. Alpha is understood to be the portion of a manager's risk-adjusted return that can be attributed solely to the skill of the manager. Beta is therefore the portion of the manager's risk-adjusted return that can be attributed to the performance of the market. For example, an S&P 500 Index fund should only exhibit beta while a true market neutral manager should only exhibit alpha. Statistical methods can be used to estimate the two variables.

The process of alpha transport generally involves the use of derivatives to manage beta exposure. The underlying collateral pool can then be invested in alpha generating strategies. For example, the investor might determine that they have a very skillful manager outside the large-cap equity space that consistently produces a material amount of alpha that they would like to capture in their large-cap equity portfolio. If the manager is judged to have no existing beta in their portfolio, the process is straightforward: The existing portfolio can be overlayed with S&P 500 futures to create an alpha transport strategy. In this context the excess return that the manager produces relative to the LIBOR based funding cost of S&P futures will be additive to the performance of the index.



The more complex alpha transport case occurs when the manager has embedded beta in the strategy that is not the beta the client desires. For example an international manager may be very successful at outperforming the MSCI EAFE index, causing the client to want to use them in large cap space.

In this instance, derivatives can be used to strip out exposure to the MSCI EAFE, thus leaving pure alpha (i.e., LIBOR + excess return). This pure alpha can then be coupled with a long S&P 500 futures position to create an enhanced S&P 500 position.



It is the ability to seek out the best managers and transport their skill to the desired risk bucket that has made alpha transport so popular among institutional investors. In this era of lower expected returns for all asset classes, this flexibility is seen as increasingly necessary by investors seeking to meet or exceed their long term goals.

As noted earlier, the initial growth in alpha transport strategies occurred primarily in the large cap domestic equity space. The market was viewed as highly efficient and equity index futures provided investors with a low cost method for gaining beta exposure in an unfunded form. It was the initial success of these first forays into alpha transport that caused many investors to consider applications for the strategy in other asset classes. In particular, fixed-income, with its more modest expected alpha and tight dispersion of results among managers, was seen as a prime candidate. However, synthetically replicating most fixed-income benchmark indices is very challenging.

Among institutional investors, the Lehman Brothers U.S. Aggregate Index (LBA) remains the dominant benchmark for core fixed-income holdings. This index is comprised of over 9,000 different investment grade bonds that can be broken down into three primary sectors; Governments, Credits and Mortgages. Although it varies over time, each sector comprises roughly a third of the index.

U.S. Treasury futures contracts provide relatively low cost and flexible exposure to the Treasury market, which is a reasonable proxy for Government exposure. CME Group lists futures on 30-Year Treasury Bonds and 10-Year, 5-Year and 2-Year Treasury Notes. All have excellent liquidity. A basket of these contracts can be coupled together to create duration and yield curve coverage comparable to the LBA. However, this position will lack exposure to the Credit and Mortgage markets. Over the last decade a strategy that employs Treasury futures to replicate the LBA produced a tracking error of approximately 1.00% annually with the benchmark. Within the context of alpha transport programs, where performance risk is usually allocated to the alpha source, this level of tracking error in the beta can be problematic for many investors.

In the last year Swap futures contracts have gained some traction with investors. These instruments allow investors to gain exposure to interest rate swaps that are correlated with pure credit. Currently, there are 30-Year, 10-Year and 5-Year Interest Rate Swap futures contracts traded at CME Group. Most liquidity is in the 10-Year with the 5-Year not too far behind, and the 30-Year lagging behind the field in terms of overall liquidity. Adding an optimal blend of swap futures as a proxy for Credit to the Treasury-only replication has been shown to reduce tracking with the LBA by almost 30%. While definitely an improvement, even 0.70% of annual tracking error can be difficult for investors to accept within an alpha transport framework.

Understanding this problem, the CME Group recently introduced CME Lehman Brothers U.S. Aggregate Index futures, which allows investors to gain exposure to this very popular fixed-income benchmark. The contract is constructed much like an equity index contract. It is cash-settled on a quarterly basis (Mar/Jun /Sep/Dec). Therefore, assuming an investor can purchase the contract near fair value, they are assured of close tracking to the LBA index if it is held to maturity.

The benefits of having a single contract to trade exposure to an index with over 9,000 underlying bonds are not to be underestimated. It brings a new dynamic to the discussion of alpha transport within the fixed-income asset class. The potential to dramatically reduce benchmark tracking error and trade in more modest sizes makes many opportunities more viable. Investors can now seek out higher volatility alpha strategies that have corresponding higher expected returns. Furthermore, by gaining the ability to trade exposure in smaller sizes, investors can manage their beta risk more precisely and make adjustments as need to reflect changes in the underlying alpha pool. All of these are very tangible benefits that investors gained with the introduction of the contract.

Conclusion

In order for these benefits to be fully realized, more liquidity must develop in the CME Lehman Brothers U.S. Aggregate Index futures contract. To date, trading has been light and the contract is consistently offered rich relative to the index. This pricing anomaly demonstrates what many market participants believe: The LBA is not an easy benchmark to consistently outperform and that fact creates many natural buyers of the index but few sellers. This imbalance will have to be overcome for the contract to reach its potential. One possible natural LBA contract seller could be an investor who is overweight to fixed-income relative to their asset class target. They could easily use the contract to efficiently reduce exposure to the LBA index.

We remain hopeful that interest in the CME Lehman Brothers U.S. Aggregate Index futures contract will grow among the broader investment community. The existence of an active and efficient market in this contract will make alpha transport and other fixed-income overlay strategies more viable for investors in the future.

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