Portable Alpha 2.0

While consistent, uncorrelated returns are the foundation for any portable alpha strategy, the financial crisis exposed inadequate liquidity as a major shortcoming in several structures.

Stung by the compounding effects of tumbling equity markets, beta-related margin calls, and illiquid alpha engines, investors withdrew en masse from portable alpha strategies following the crisis as assets in the category fell by nearly 44% during the year that ended on September 30, 2009.¹

Although investors’ perception of portable alpha strategies may have dimmed in recent years, the difficulty of identifying sources of consistent alpha generation remains, especially considering how closely active equity managers resemble their benchmarks over the long term. As a result, interest in portable alpha and its traditional tenets has returned, but with the realization that liquid and uncorrelated alpha engines are paramount to the success of the overall strategy.

The Familiar Equity Dilemma

Investors who have recently waded back into the equity markets have become reacquainted with the difficulty of identifying active equity managers capable of generating consistent alpha. Often, this search is further complicated by the need to accept high tracking error and/or low information ratios in the quest to achieve even moderate excess returns.

The challenges that active equity managers face in generating alpha exist regardless of the time horizon. For example, over a short-term horizon, nearly half of large-cap equity managers failed to outperform the S&P 500 Index in the year that ended on March 31, 2014, as seen in the following chart. The underperformance could also be substantial as the bottom performers trailed the index by nearly 650 basis points.

Although more than half of the active large-cap equity managers outperformed the benchmark over one year—and some by a wide margin—viewing returns over a longer-time horizon unveils another significant hurdle to consistent outperformance.

¹ Pensions & Investments, February 8, 2010.
Over a 10-year time horizon, the spread between the returns of active equity managers compresses greatly, narrowing the outperformance of managers in the top quartile to only 162 basis points over those in the third quartile, as reflected in the chart above.² The compression leaves the universe of active managers with long-term performance that closely resembles that of the benchmark index, thus providing investors with relatively little long-term alpha given the costs incurred.

The hurdles to achieving consistent outperformance are also observed in the relatively low information ratios for large-cap equity managers, which remain below 0.3 even over longer time periods, as seen in the following chart.

Considering the persistent challenges investors face in selecting top performing large-cap equity managers, a recent survey of institutional investors revealed that, on net, only 3% of the respondents had increased their equity allocation within the past six months. Meanwhile, the survey showed that, on net, 6% of the respondents had increased their allocations to portable alpha strategies during the same timeframe.³

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² MPI Stylus, March 2014.
³ bfinance 2014 Pension Fund Asset Allocation Survey. Based on investment decisions during the six months prior to the January 2014 publication.
Portable Alpha 1.0—Exposed by Volatility

Traditional portable alpha constructs combine equity futures and a cash buffer to generate equity beta exposure, leaving the majority of cash to be invested in an alpha engine that is designed to deliver uncorrelated excess returns. Investors who have expressed renewed interest in portable alpha may be wary of those alpha structures that could re-expose them to a high degree of correlation to beta pools and/or alpha engines that could become extremely illiquid during periods of heightened volatility. These are the lessons learned from the first iteration of portable alpha.

For example, a popular structure that emerged before the financial crisis consists of a beta overlay that is essentially enhanced with a short-duration credit or absolute return strategy. While this structure not only falls short of meeting the definition of portable alpha, its performance during the financial crisis also missed the mark of what was expected of portable alpha strategies. Many, if not all, of these “alpha” strategies exhibited significant positive correlations to their underlying beta pools, experienced substantial asset drawdowns, and failed to provide consistent access to liquidity.

Another pre-crisis structure uses hedge funds of funds, which epitomized the illiquid conditions during the height of the crisis. Given their layered composition, funds of funds were quick to gate investors’ access to capital once they were gated themselves. As a result, investors were unable to access their capital and looked to sell other assets to raise cash to meet their margin calls. This spiraling process contributed to the extreme market turbulence and the increased correlations between alpha pools and beta overlays.

Portable Alpha 2.0

Just as the financial crisis exposed the shortcomings of some widely-used portable alpha structures, it also helped redefine the new tenets of portable alpha:

- **Ample Liquidity**
- **Uncorrelated Alpha Streams**

The ample liquidity of alpha engines within the Portable Alpha 2.0 construct should address two dimensions: the first is the ability to satisfy margin calls from high volatility beta sources in times of stress, and the second is the ability to adjust the risk position of the alpha engine as capital is depleted to meet those beta-related margin calls. As detailed in the following section, these criteria reflect the evolution in portable alpha in its potential to preserve investors’ access to capital, experience relatively quick reversions following periods of volatility, and contribute to the consistent lack of correlation between alpha engines and beta pools.

The uncorrelated nature of alpha streams to underlying beta exposure is important as it allows mean-reverting risk positions to be held during times of stress and helps eliminate the potential for forced sales. Properly accounting for correlation risk in all market environments should improve the longevity of the overall strategy in Portable Alpha 2.0.
A Portable Alpha 2.0 Structure via the Government-related Sectors

Given our experience and scale in the fixed income markets, we have observed that the highest quality government-related sectors comprise the depth and transparency to provide ample liquidity, yet they frequently present mispricings that may provide consistent, uncorrelated alpha streams. As a result, we believe these sectors (U.S. Treasuries and derivatives, for example) comprise one of the most efficient alpha generating engines in the new portable alpha regime.

While market liquidity can be measured in several ways (bid/ask spreads, market depth, speed of trade execution, market resiliency, trading volume), from an investor’s perspective, liquidity translates into the ability to generate cash if needed. The high-quality status and the market liquidity within the government-related sectors has equated to some of the lowest margin requirements and borrowing costs throughout the capital markets, as seen in the following chart. This results in a high level of “borrowability,” or the amount of cash that could be raised in one business day, and greatly reduces the need to immediately sell other assets to raise cash in order to meet beta-related margin calls.

Even when financing terms worsened dramatically for most other asset classes during the financial crisis, initial margin terms remained relatively low for government-related assets.

In addition, when the risk profile of the alpha engine changes as capital is used to meet beta-related margin calls, the liquidity in the alpha source facilitates its repositioning in order to maintain investors’ desired risk exposure.

However, this liquidity does not necessarily imply that alpha engines focusing on the government-related markets are immune to periods of extreme volatility. In particular, during deleveraging episodes, relative-value positions may deviate significantly from fair value (or other, traditional market relationships). Yet, given the depth and transparency of the government-related sectors—and the stable financing terms of those assets—when dislocations arise during periods of extreme market volatility, there is a tendency for those dislocations to revert relatively quickly once conditions begin to stabilize.
The historically quick stabilization of the government-related sectors relative to the major debt and equity markets supports the potential for an alpha stream to remain uncorrelated to a beta source throughout a market cycle. For investors reconsidering portable alpha, the potential for consistently low correlation levels may represent one of their most sought-after attributes as it mitigates the need to raise cash from the alpha engine during one of the brief intervals when mean-reverting, relative-value trades continue to deviate. Furthermore, the lack of credit or default risk is another attribute of the government-related sectors that should maintain low correlation levels, while also contributing to the historically brief recovery times from periodic draw downs.

A strategy that seeks to provide uninterrupted liquidity and uncorrelated alpha opportunities may do so in several ways. One frequently occurring example involves exploiting arbitrage opportunities between developed market futures contracts and the underlying government-related securities, which may have a convergence timeline that is determined by the expiration date of the futures contract, typically three months into the future. Therefore, while short-term dislocations in the relationship may arise, the subsequent recovery and alpha stream have the potential to be much more reliable.

An alpha engine focused on the government-related sectors may also use relative-value trades to capitalize on the multitude of fair value deviations that exist throughout the markets. For example, the following chart demonstrates the degree of structural dislocations along the U.S. Treasury yield curve, which a strategy may look to exploit with long positions in the cheap segment of the curve that are paired with short positions in the rich parts of the curve.

![Yield deviations from fair value chart](chart)

This type of pairs trading with overvalued and undervalued securities may not only provide a consistent source of alpha, but it may also provide further support in maintaining a portfolio that is uncorrelated to the major debt and equity markets. The neutrality also addresses a number of concerns that were noted in a recently conducted survey of hedge fund investors, who listed uncertainties regarding monetary and political policies among their most prominent concerns.4

Although the returns from relative-value positions may be relatively small when viewed independently, the depth of the cumulative opportunity set across the U.S. government-related asset classes comprises a meaningful source of long-term alpha with the potential to generate significant excess returns.

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4 Credit Suisse, March 2014
The combined attributes of an alpha engine that is focused on the government-related sectors, including the consistent relative-value opportunities, the benefits of a market-neutral profile, and the absence of corporate credit risk, support the indications that investors have developed an appetite for relative-value strategies, as displayed in the following chart.

**Conclusion**

Despite an environment of low volatility and strong returns, many active equity managers still struggle to outperform their benchmarks over the long term. It is a phenomenon that underscores the attraction for portable alpha as a concept, particularly its potential for uncorrelated performance and long-term alpha generation.

By serving as a litmus test, the financial crisis showed that portable alpha strategies not only need to be sound in their concept, but also in their structure. Therefore, while the investment objectives of portable alpha have not changed under version 2.0, the structural focus of maintaining the potential for ample liquidity and uncorrelated alpha streams reflects portable alpha’s evolution towards achieving those objectives and their various attributes, including consistent access to capital and relatively quick reversions following periods of volatility.
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