

USING PORTABLE ALPHA TO ENHANCE RETURN EFFICIENCY



Fiduciary Insights

PORTABLE ALPHA STRATEGIES TRANSFER ALPHA FROM ONE ASSET CLASS TO ANOTHER BY COMBINING HEDGE FUNDS WITH FUTURES. This feature enables such strategies to exploit opportunities in all asset classes. Since portable alpha products are designed to maximize return per unit of risk, they can be useful tools in improving the return efficiency of an institution's total portfolio, as we illustrate in building an "alpha pyramid."

Finding Alpha Where It Is

The subject of portable alpha reminds us of an old joke about a man who, having dropped his wallet at night, was frantically looking for it, but only under a bright street light. When asked why he didn't search in the darkness, he replied, "Because it's too hard to see it over there." Alpha, like the lost wallet, is not likely to be found where it can be most easily seen. Yet it can be found where it is and moved elsewhere, using portable alpha strategies.

Alpha is the value added by a manager over a benchmark return. In a portable alpha strategy, futures are used to transfer alpha from the dark corners of the market where it is more likely to be (e.g., hedge funds) to the brightly lit, picked-over places where it is not (such as traditional long-only U.S. equity strategies).

The core of a typical portable alpha strategy consists of one or more hedge funds that can produce alpha (but little or no market exposure, called beta). The hedge funds, although in some cases individually volatile, are uncorrelated with each other. As a result, when carefully selected and combined in a diversified group, their aggregate volatility is greatly reduced, to bond-like levels. To provide equity market exposure and effectively link the hedge fund alpha to U.S. equities, equity futures are purchased. Alternatively, instead of equity futures, bond futures can be used to attach the alpha to fixed income. For that matter, the alpha can be "carried" to any asset class that has index futures – hence the handy term "portable alpha" (a misnomer, since the alpha does not really go anywhere except by the magic of accounting).

Advantages of Portable Alpha Strategies

By refocusing the search for alpha to where it may be most abundant, portable alpha strategies can potentially offer higher return for risk than traditional long-only managers, and substitute for them. By separating alpha from beta, the investor liberates the hedge fund managers from chasing market indices, allowing them to seek to maximize return from both the long and short sides of their respective markets. Alpha from any source becomes fair game. Obviously, the success of a portable alpha strategy is dependent on the ability of the selected hedge fund managers to generate appropriate levels of alpha.

This advantage makes portable alpha strategies a valuable tool with the potential to improve the return efficiency of an institution's entire portfolio. To illustrate, suppose we are a typical institution with a policy allocation to passive long market exposures, carrying a target return of 3% over cash and volatility of 10%. Let's further suppose we can buy a portfolio of hedge fund strategies with an expected return of 3% over cash, a volatility of 3%, and no correlation to market exposure.

If we want to minimize risk while earning a 3% return over cash, then we could put all our money in hedge funds, reducing volatility to 3%. But if our goal is to maximize return within a limit of 10% volatility, then we could lever our hedge fund portfolio 3.3 times, raising our return to 10%.

The problem with these risk-minimizing and return-maximizing hypothetical portfolios is that they both produce too much tracking error: 10% for the 100% hedge fund portfolio and 14% for the levered hedge fund portfolio. That is too much relative risk for most institutional investors.

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But a portable alpha strategy has the potential to meet all our objectives. A 100% allocation to hedge funds with a 95% allocation to our policy market exposure through a futures overlay, if we could put such a portfolio in place, could produce a portfolio with a 5.9% return (nearly double the target), 10% volatility, and 3% tracking error under the above assumptions.

Constraints in Using Portable Alpha

A primary constraint in using portable alpha strategies (in addition to identifying alpha opportunities) is not volatility, but liquidity. Gains and losses on futures contracts are settled daily, so collateral must be available every day. If an investor commits 100% of its capital to illiquid hedge fund partnerships, then it has no collateral. To avoid insolvency during the worst market declines, the investor must maintain enough liquidity — an amount equal to 30-50% of the futures principal for equity futures, less for fixed income futures — to support the futures positions. As a result, an investor can for practical purposes maintain a full policy beta exposure, overlain with a partial portable alpha exposure.

Building an Alpha Pyramid

Institutions can use portable alpha strategies to seek improved returns in a step-by-step process in which asset classes and strategies are treated as building blocks, each contributing some alpha to the total result. We refer to this process as building an alpha pyramid (Exhibit 1).

Our hypothetical pyramid is designed to raise the total portfolio's Sharpe and information ratios. The Sharpe ratio, a measure of return efficiency per unit of risk taken, is a portfolio's

return minus a risk-free return, divided by the standard deviation of the portfolio's return. The information ratio, which measures the reward for deviating from a benchmark, is alpha divided by the standard deviation of alpha.

The foundation of the pyramid is the institution's passive policy portfolio. The policy portfolio should be efficiently diversified, including an allocation to alternatives. This foundation level of the pyramid by itself is designed to produce a moderate Sharpe ratio, say 0.30, in this hypothetical example.

In the next layer of the pyramid, we broaden the policy portfolio's asset mix, putting 5% of total assets into structural tilts toward relatively inefficient market segments, such as small cap stocks and emerging markets. This step raises the assumed Sharpe ratio slightly, but with a very low information ratio, about 0.08 in our example.

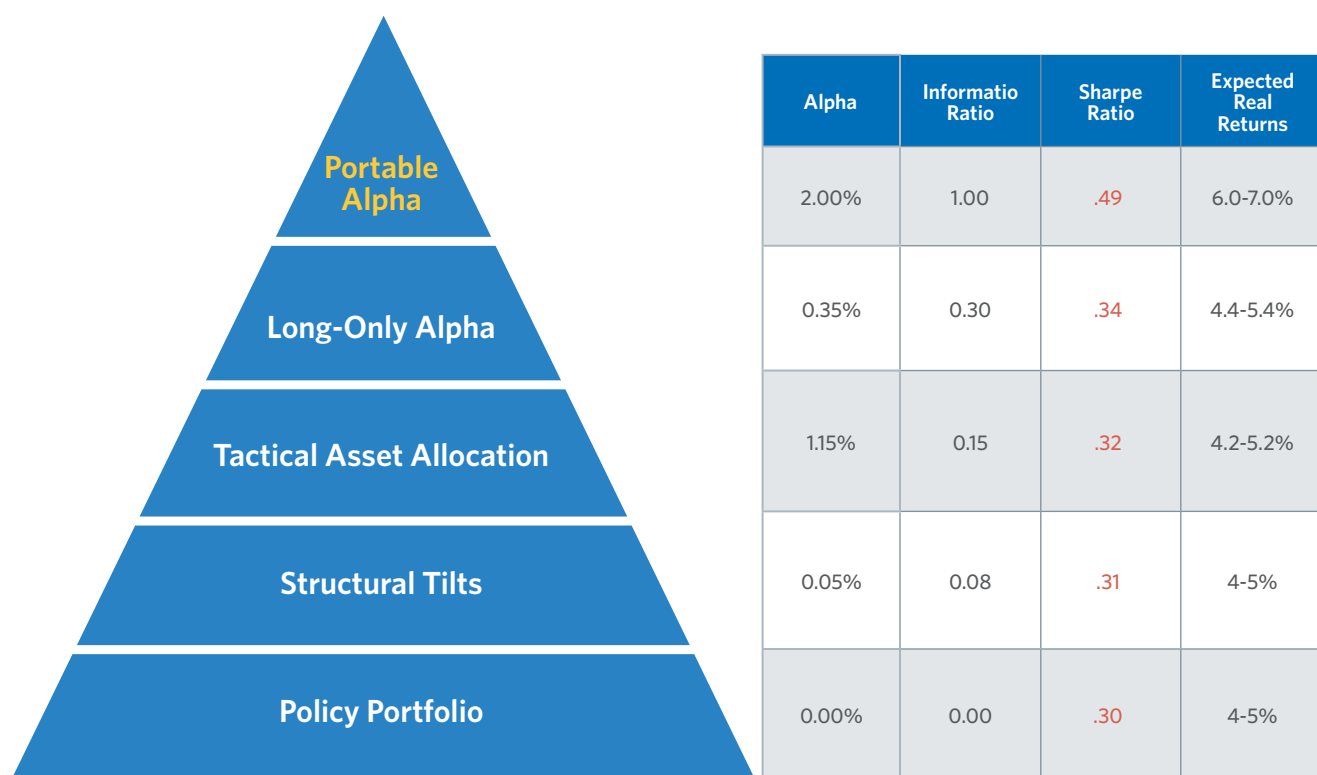
To take advantage of asset class mispricing, we then add disciplined tactical asset allocation, with 10% of assets. This part of our pyramid increases the assumed Sharpe ratio a bit more, with an information ratio of about 0.15.

For our next tier, we focus on delivering alphas from long-only strategies in inefficient segments of the market, using 20% of the total allocation. This raises the assumed Sharpe ratio to 0.34 and information ratio to 0.30.

The apex of our alpha pyramid is portable alpha from hedge funds. At this final level, we overlay active pure-alpha strategies on top of the long-only investment structure, as illustrated here with 33% of the total allocation. In our example, this top layer increases the assumed total Sharpe ratio to 0.49 and information ratio to 1.0.

Each level of our alpha pyramid contributes to the overall improvement in the assumed Sharpe ratio. In this example, we have substantially enhanced the production of return per unit of risk by raising the Sharpe ratio from 0.30 to 0.49.

EXHIBIT 1:
An Alpha Pyramid ⁽¹⁾



The “Alpha Pyramid” is a conceptual framework for constructing portfolios based on Strategic’s Alpha and Real Return assumptions set forth above. It is not investment advice, nor is it a promise of future performance.

(1) Alpha is shown to illustrate how the potential for value-added, in our judgment, relative to other portfolios would impact risks and returns. It is not a promise of value-added.

In the event any of the assumptions used herein do not prove to be true, results and risks are likely to vary significantly. These examples are for illustrative purposes only and do not purport to show actual results. There can be no assurance that assumed forecasts and estimates will be achieved. Because the assumptions set forth in the illustration do not involve actual trading, they do not account for the impact of financial risk on actual trading, such as the ability to adhere to a particular strategy in spite of significant trading losses.

Conclusion

As our alpha pyramid illustrates, combining alpha derived from the areas where it can be most easily found with desired beta market exposures may be a useful way of increasing the return efficiency of an institution's assets. The risk management tools, techniques and governance practices of portable alpha strategies are not fundamentally different from those used with conventional portfolios. With both, portfolio volatility may be limited by controlling market exposure. The advantage of portable alpha strategies is that they enable us to seek to capture alpha wherever we happen to find it, to enhance the institution's overall return productivity.

Strategic Investment Group

Strategic, a pioneer in dedicated Outsourced CIO (OCIO) solutions since 1987, offers a comprehensive service platform for managing customized portfolios for institutional and private investors. Our proprietary process combines active portfolio management, rigorous risk management, and open architecture manager selection.

Strategic functions as our clients' investment partner and co-fiduciary, effectively becoming an extension of their resources. Clients are then free to focus on their core businesses, while we focus on providing the highly specialized portfolio management expertise that clients need to meet their investment goals. Depending on a client's needs and preferences, Strategic can orchestrate the management of an entire portfolio comprising multiple asset classes, focus on specific asset classes, such as alternatives (e.g., hedge funds, real estate, and/or private equity) or international investments, or manage strategies with high potential for adding value (e.g., portable alpha through investor-friendly turnkey structures). Customized liability-driven investing (LDI) solutions, whether through an integrated total portfolio approach or a targeted long-duration strategy, are also available, as are solutions that address mission-related investment objectives.

We strive to build enduring partnerships with our clients by strengthening their investment programs through a dynamic, value-enhancing investment process, sound governance framework, and world class client service. Our mission is to empower investors through experience, innovation, and excellence.

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