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Portable Alpha

Putting portfolio capital to its highest and best use

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In today's markets of low yields and lower expected asset class returns, investors are looking for ways to increase overall portfolio performance while maintaining a diversified* asset allocation.

Portable alpha strategies can help investors seek both of these outcomes.

By separating the alpha and beta components of traditional asset classes, portable alpha strategies help investors put their capital to its highest and best use.

We continue to see the use of portable alpha strategies because they enable investors to maintain their overall strategic risk allocation and add incremental active risk from parts of the market where alpha is expected to be more abundant or diversifying.

In equity portfolios, we find that market capitalization is a common driver of portfolio asset allocation weights, but it is not an optimal starting point for active risk allocation.

In fixed income portfolios, we find that low expected levels of return make the asset class not the best use of portfolio capital. Furthermore, most managers have relied on credit-sensitive securities to boost yield and return—essentially delivering credit market beta and a potentially high correlation to equities.

Portable alpha strategies can help solve these issues across both asset classes. They can allocate active risk based on other alpha opportunity sets in equities, and they can help construct a more diversified source of active return than traditional bond portfolios.

These are just some of the ways that portable alpha strategies can unlock portfolio capital to help investors build more diversified, higher risk-adjusted return portfolios.

* Diversification does not guarantee a profit or eliminate the potential for loss.

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Defining portable alpha

The objective of a portable alpha strategy is to generate returns in excess of a specific market index such as the S&P 500 Index, MSCI ACWI Index, or Bloomberg Barclays U.S. Aggregate Bond Index.

A portable alpha strategy is composed of:

1 A target index exposure, or **"beta"** component

2 A separate source of excess returns, or **"alpha"** component

Portable alpha strategies effectively separate the returns of a target index, or beta, and the returns of an alpha-seeking manager, or alpha. This separation allows the returns of the alpha component to be "ported" on top of whatever market index exposure is desired by an investor.

Mechanics of portable alpha strategies

There are three key steps to implementing a portable alpha strategy (Figure 1). First, the investor chooses a target index for their beta exposure. Second, the target index is replicated using market-linked instruments, which typically only require a small amount of cash in the form of a margin requirement to achieve the exposure, but also come with a cash financing cost. As a result, there is excess cash to allocate capital. The final step in the process is to invest the remaining funds in an alpha source and a cash reserve.

Thus, the return generated by the overall strategy is a function of how much capital is allocated to the alpha source, how much return they generate, the return of the index exposure, and the cost to finance the index exposure.

It is important to note that in a portable alpha framework, the alpha-seeking manager is additive to the portfolio as long as they produce positive returns greater than the cost to finance the index exposure.

Understanding expected returns

Using the simplified example in Figure 1, let's assume that 100% of the target index exposure is created using market-linked instruments at a financing cost of 1.0%. Due to the fact that 40% of the index exposure is backed by physical cash (20% margin and 20% reserve), it can be reinvested in a cash rate to match the financing cost rate. Thus, the remaining 60% of exposure comes at a cost of 0.6%

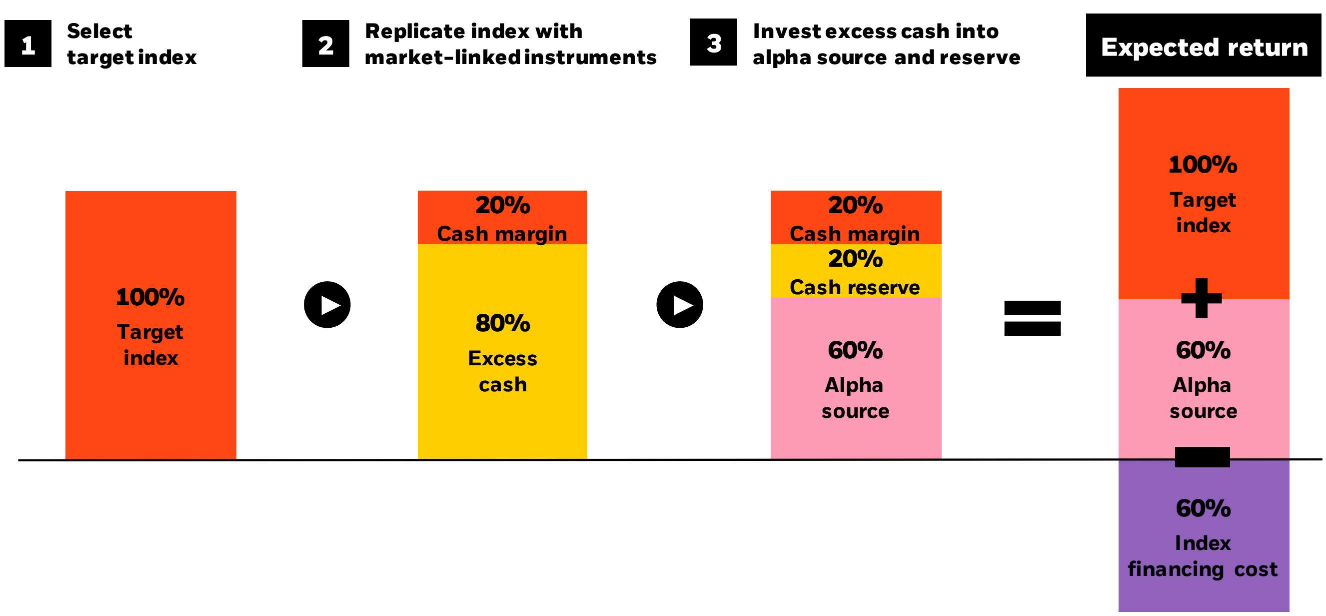
Next, the alpha-seeking manager is then looked upon to generate some level of positive return. As 60% of the overall portfolio is invested with the alpha-seeking manager, the investor would receive 60% of the alpha generated by the manager. If the alpha-seeking manager was targeting a return of the 5%, then the overall investment would have an expected return of the target index return plus 3% for the alpha source, minus 0.6% for the cash financing cost.

Overall, this would equate to a return to the investor equal to the market index return plus 2.4%

Potential risks

Like all investments, there are potential risks involved in a portable alpha framework. Primarily, it is possible for the alpha-seeking manager to underperform the cash rate or generate negative absolute returns. Market-linked instruments may not perfectly track a market index over time, creating tracking error that may differ from initial return expectations. Secondly, market-linked instruments have the potential for margin calls after large market moves that may require adjustments in the whole portfolio.

Figure 1: Example implementation and expected return of a portable alpha strategy



For illustrative purposes only. "Expected return" in the chart above assumes a 20% cash reserve and 20% cash margin that can be reinvested at the same rate as the cash financing cost to fund the market-linked instruments. Thus the expected return is equal to the return of 100% market index plus 60% alpha source minus 60% cash financing rate.

Key consideration

Selecting an alpha source

Investors should be mindful to select an alpha-seeking manager with limited market beta exposure. Rigorous analysis on the manager's return profile is required to achieve this. Investors must feel confident that they are not getting a tilt into risky assets, such as credit or equity, as this can result in additional market exposure above and beyond the target index.

While periods of underperformance may happen even for uncorrelated managers, the long-term goal of the alpha-seeking manager should be to generate returns that are uncorrelated to the target market index.

The key implication of a portable alpha framework is that if they seek above market returns, they don't necessarily have to choose a manager with an aggressive risk and return profile. A manager with an uncorrelated, more defensive profile may increase the probability of consistently outperforming the financing rate overtime, and thus be additive. Figure 2 outlines some of the features we believe are most appropriate to consider for the alpha source selection.

Figure 2: Alpha source considerations

Does the alpha-seeking manager exhibit:

- ✓ A consistent history of returns in excess of cash financing costs
- ✓ A low correlation to the beta component of the portable alpha strategy
- ✓ A return profile independent of other market betas in the entire asset allocation
- ✓ A high-breadth portfolio that limits concentrated single security or factor bets
- ✓ A liquid underlying portfolio in case of funding shortfalls in the beta position

Based on the views and opinions of BlackRock Systematic Investing as of April 2021.

A popular option for the alpha component of portable alpha frameworks are **global long/short market neutral** and **multi-alternative** strategies. These types of strategies aim to generate positive absolute returns in excess of a cash rate over many different market environments, making them a practical investment to combine with beta exposure that has cash financing costs.

Additionally, these types of strategies typically look globally for the best opportunities to deliver alpha, and generally avoid exposure to market betas which might correlate with the target market index.

Why portable alpha?

Putting portfolio capital to its highest and best use

The key advantage of a portable alpha framework is that it allows investors to untether a portfolio's active risk budget from the beta allocation without disturbing it. Most importantly, it unlocks portfolio capital to be used to seek excess returns in areas of the global financial markets that have the highest potential to generate alpha.

For investors, building the optimal asset allocation for the market return, or "beta" component, of your portfolio is quite different than the optimal capital allocation for seeking excess returns, or "alpha" component, of your portfolio.

In equity portfolios, we find that market capitalization is a common driver of portfolio asset allocation weights, but it is not an optimal starting point for active risk allocation.

In fixed income portfolios, we find that most managers have low active risk budgets and derive the majority of their active return from tilts into credit-sensitive securities—essentially delivering beta and a potentially high correlation to equities.

In the following sections, we will look at two case studies that show how a portable alpha strategy can pursue meaningful and diversified excess returns in both the equity and fixed income portion of an asset allocation.

Fixing the alpha-beta mismatch in equities

The concentrated nature of market cap weighted indices is a difficult starting point for active risk budgeting, as it dramatically tilts the portfolio allocations away from the most diverse, high-breadth market segments.

Figure 3 breakdowns the MSCI All Country World Investable Market Index into conventional segments in which clients and managers typically organize their equity allocations.

Both tend to subdivide the equity market along geographic and capitalization categories such as US Large Cap, International Small Cap, Emerging Markets, etc.

While following market cap weighted indices are a well-prescribed starting point for your overall equity market beta allocation, it can have consequences on the effectiveness of your alpha-seeking efforts.

Most notably, the amount of capital allocated to active managers in each category is typically bound with its market cap weighting in the broader index.

For example, US Large & Mid Cap exposure is typically over half the overall equity allocation, while International Large Cap is roughly a quarter. The other more diverse equity segments, and where risk-adjusted returns potential may be greater based on top-quartile manager returns, combine to be just under 25% of the total equity exposure.

Manager selection can only go so far

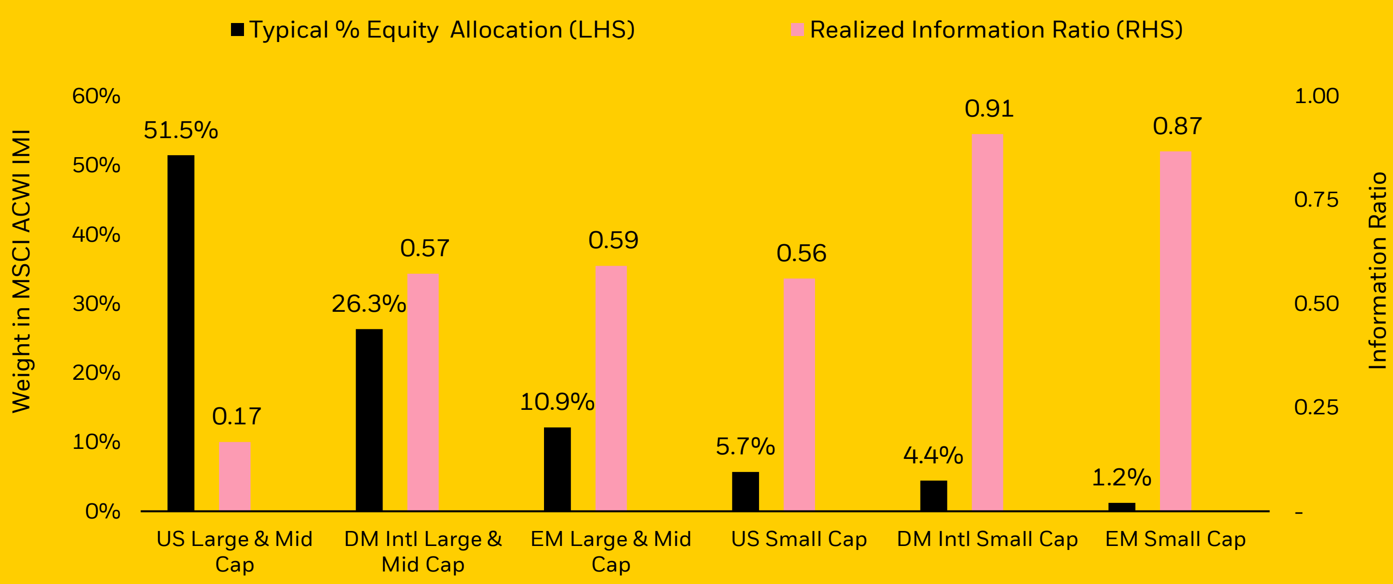
In our experience, consistently finding skilled, top-quartile performing managers can be a challenge. Even exceptional manager selection is still bound by asset class limitations.

As shown in Figure 3, even if you were successful in identifying a top-quartile manager in the US Large & Mid Cap segment, the overall portfolio impact might be muted. Why? Selecting a top-quartile manager in the segment would have only resulted in an information ratio of 0.17 on about 50% of your total equity allocation. On the other hand, selecting a top-quartile DM International Small Cap manager would have been far more rewarding with an information ratio of 0.91, but that would likely only be a small portion (<5%) of your total portfolio.

Manager selection matters less if the starting point of an asset allocation is not aligned with alpha opportunities. Portable alpha can help with this alpha-beta mismatch.

Figure 3: Market cap equity allocation is misaligned with alpha potential

MSCI ACWI IMI segment allocations & realized 10-yr information ratios of top-quartile managers



Source: MSCI, eVestment, BlackRock as of 31 December 2020. "Typical % Equity Allocation" represented by the market-capitalization weights of the MSCI ACWI IMI Index. Information ratio is a measure of an active manager's ability to generate risk-adjusted excess returns versus a representative market benchmark. "Realized Information Ratio" is the observed 10-year information ratio for the top-quartile managers in the eVestment database for each market segment. Indices are unmanaged and one cannot invest directly in an index.

Putting portable alpha to work in US equities

What are the potential benefits of a portable alpha framework in equities? Broader opportunities to generate alpha in the largest parts of the portfolio where meaningful outperformance may be difficult.

Broader and more robust alpha opportunities

Let's assume we want to get more return from a US Large Cap allocation. If we use a portable alpha approach to replicate S&P 500 beta exposure and make a 60% investment into an alternative strategy such as a global long/short market neutral strategy, the portfolio outcomes can be much more impactful than strong manager selection alone.

Global long/short market neutral strategies are typically high-breadth portfolios that are able to look across global equity markets for opportunities, not just a particular market segment like US Large Cap securities. Importantly, because these types of strategies take both long and short positions they often seek to take advantage of security dispersion in markets, and do not add significantly more beta exposure. As a result, the returns from these types of strategies can be less dependent on market direction, potentially acting as a compliment to the index exposure in up markets and a buffer against volatility in down markets.

Figure 4 compares the alpha generated by the top-quartile of US Large Cap Core equity managers to a portable alpha framework that replicates the S&P 500 Index through market-linked instruments while holding a 60% allocation to an alternative strategy, represented by the HFRI 500 Equity Market Neutral Index.

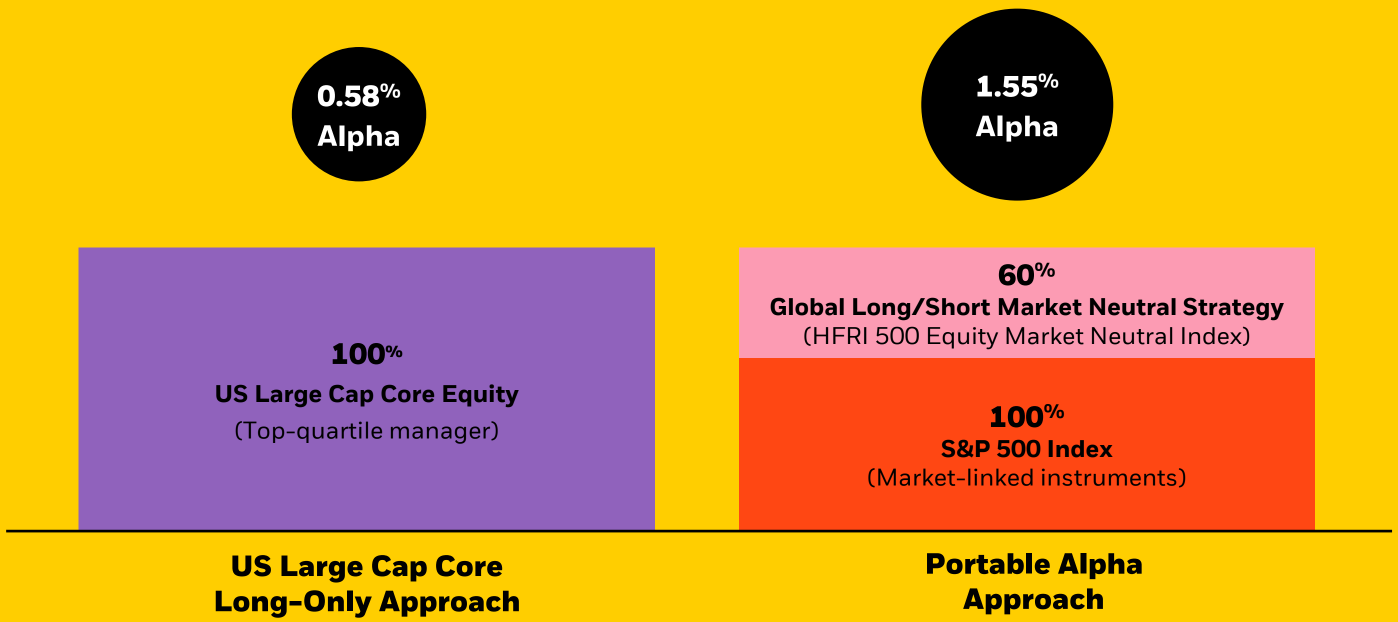
As you can see, the realized 10-year annualized alpha of a top-quartile manager is 0.58%. In comparison, 60% of the HFRI 500 Equity Market Neutral Index return of 3.22%, which represents just the average return of the managers in the category, results in an annual alpha of 1.93%. After adjusting for 60% of the 0.63% average annual financing costs of the beta exposure over the time period, as measured by the ICE BofA 3-Month Treasury Bill Index, the total alpha of the approach is 1.55% annually.

Summary

In a portable alpha framework, untethering alpha generation from the confines of market-cap weighted asset allocations allows investors to optimize return potential away from segments of the markets that are typically the largest, but hardest to generate meaningful excess returns.

Figure 4: Comparing results of a traditional long-only and portable alpha approach

Hypothetical annual alpha generation based on approach



Source: eVestment database as of 31 December 2020. "Traditional Long-Only Approach" alpha data based on the 10-year average annual alpha generated over the S&P 500 Index for the top-quartile (25th percentile rank) manager in the eVestment US Large Cap Core category. "Portable Alpha Approach" alpha calculated as 60% of the average annual return of the HFRI 500 Equity Market Neutral Index minus 60% of the ICE BofA 3-Month Treasury Bill Index. The HFRI 500 Indices are global, equal-weighted indices comprised of the largest alternative funds published by Hedge Fund Research, Inc. Indices are unmanaged and one cannot invest directly in an index.

CASE STUDY: CORE US FIXED INCOME

Combating low yields and low return expectations in core fixed income

Persistently low global fixed income yields and low return expectations create serious challenges for fixed income allocations to help meet long-term return objectives.

To combat the low yield environment, many fixed income managers have resorted to "reach for yield" behavior—essentially going further and further down the credit quality spectrum to eek out extra yield to boost returns. But this type of strategy has consequences.

Source of active return matters

In the Figure 5, we regressed 15 years of Core Bond and CorePlus manager returns against a simple three factor model which included credit risk, equity risk, and rate risk.

We found that approximately 65% of Core manager and 70% of CorePlus manager excess returns were explained by these static exposures.

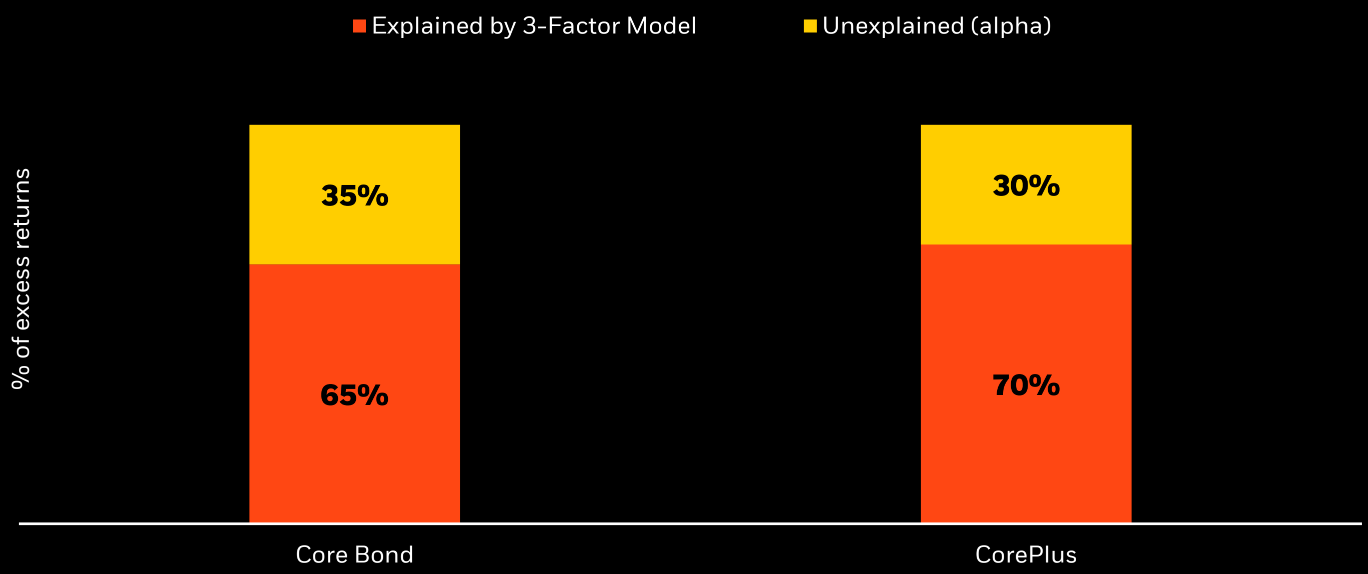
Of the three factors, the credit risk factor exposure was most explanatory. This implies that many traditional active Core and CorePlus managers have relied on an overweight to credit-sensitive securities to drive excess return.

This has a very important, but often overlooked, effect on total portfolio diversification. The credit overweight may boost returns in up markets, but result in larger fixed income drawdowns in periods of equity sell-offs—the very time when investors need the diversification of core bonds the most.

The low yield environment creates a conundrum for fixed income investors. Maintain the equity diversifying potential of high quality bonds, but starve on low yields and returns. Or, boost return potential by increasing credit-risk exposure, but open the possibility of less equity ballast in the case of a market sell-off.

Portable alpha can help seek the dual goals of enhanced return potential and meaningful portfolio diversification.

Figure 5: Bond manager excess returns largely explained by tilts to credit risk
Manager excess return composition



Source: eVestment database, as of 31 December 2020. Based on the active return versus the category benchmark over the past 15 years. Core managers benchmarked to Bloomberg Barclays US Aggregate Bond Index. CorePlus managers benchmarked to Bloomberg Barclays US Universal Index.

Putting portable alpha to work in fixed income

What are the potential benefits of a portable alpha framework in core fixed income? The ability to increase return potential in a challenged asset class and at the same time seeking idiosyncratic, equity-diversifying return streams.

Higher return with limited equity correlation

A typical fixed income portable alpha allocation can result in 60% allocation to the alpha source, with the remaining capital allocated to efficiently replicate 100% of the fixed income beta.

Instead of chasing yields in fixed income markets, using alternative strategies as an alpha source in a portable alpha framework can help preserve the equity diversifying returns investors come to expect from bond allocations.

Alternatives, like multi-strategy funds, are more focused on idiosyncratic return streams that are the result of relative value or long/short security selection opportunities. These can also provide sources of uncorrelated active return that are complementary to other active fixed income managers.

Figure 6 compares the alpha generated by the top quartile Core and CorePlus bond managers to a portable alpha framework that replicates the given benchmark while holding a 60% allocation to an alternative strategy, represented by the HFRI 500 Relative Value Multi-Strategy Index.

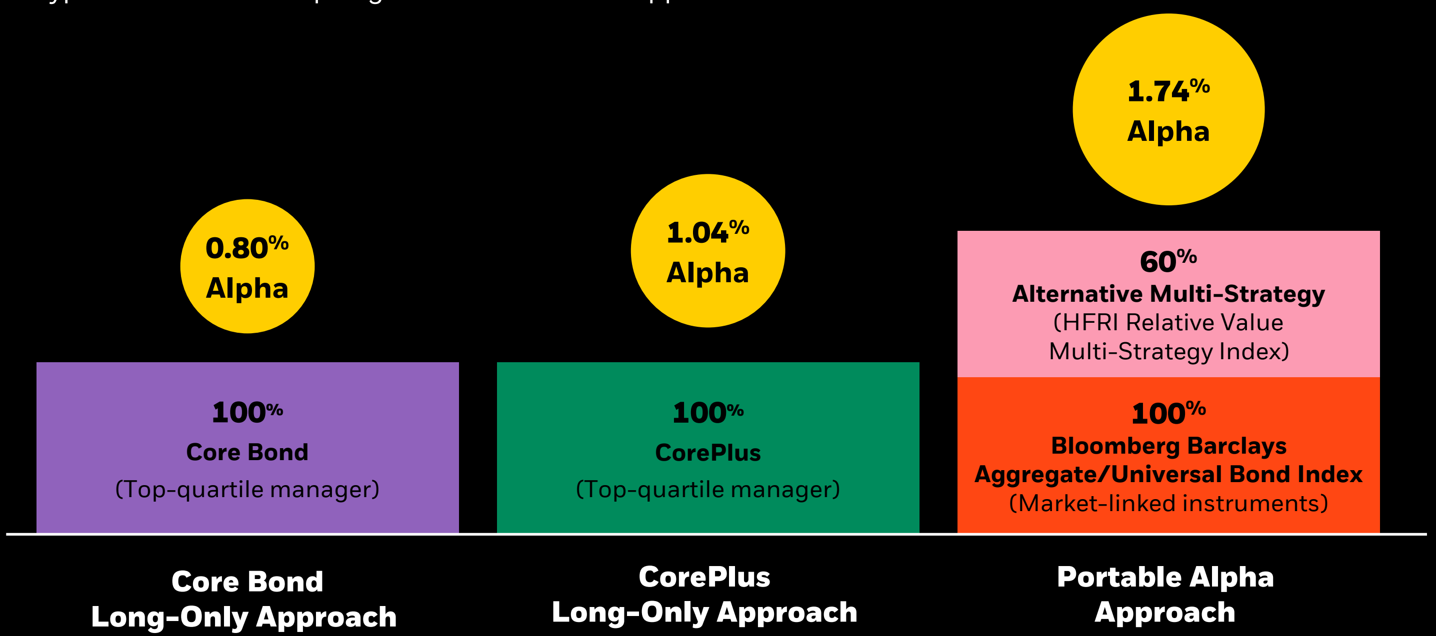
As you can see, the realized 15-year annualized alpha of a top quartile manager is 0.80% and 1.04%, respectively. In comparison, 60% of the HFRI 500 Relative Value Multi-Strategy Index return of 4.09%, which represents just the average return of the managers in the category, results in an annual alpha of 2.45%.

After adjusting for 60% of the 1.18% average annual financing costs of the beta exposure over the time period, as measured by the ICE BofA 3-Month Treasury Bill Index, the total alpha of the approach is 1.74% annually.

Summary

At a time when investors are struggling with low return expectations for fixed income, portable alpha strategies represent a way for investors to increase the overall level of potential return in their core allocations. Equally important, portable alpha can help preserve the diversifying role of bonds by seeking more idiosyncratic sources of return that are less highly correlated with credit risk.

Figure 6: Comparing results of a traditional long-only and portable alpha approach
Hypothetical annual alpha generation based on approach



Source: eVestment database, as of 31 December 2020. "Core Bond Long-Only Approach" alpha data based on the 15-year average annual alpha generated over the Bloomberg Barclays US Aggregate Bond Index for the top-quartile (25th percentile rank) manager in the eVestment US Core Bond category. "Core Bond Long-Only Approach" alpha data based on the 15-year average annual alpha generated over the Bloomberg Barclays Universal Bond Index for the top-quartile (25th percentile rank) manager in the eVestment US CorePlus Bond category. "Portable Alpha Approach" alpha calculated as 60% of the average annual return of the HFRI 500 Relative Value Multi-Strategy Index minus 60% of the ICE BofA 3-Month Treasury Bill Index. The HFRI 500 Indices are global, equal-weighted indices comprised of the largest alternative funds published by Hedge Fund Research, Inc. Indices are unmanaged and one cannot invest directly in an index.

PORTFOLIO PERSEPCTIVES ON IMPLEMENTATION

1 How should investors think about portable alpha alongside other higher return seeking alternatives like private assets?

We have found that many institutional investors are seeking higher returns by increasingly looking to private markets. In fact, 43% of respondents in the BlackRock 2021 US and Canada Institutional Sentiment said they planned to "substantially increase" or "modestly increase" their portfolio allocations to private markets. These investors are looking at areas such as distressed debt, private equity, and real assets for enhanced returns.[1]

However, as investors increase their allocations to these non-traditional asset classes, it comes with some challenges in the form of maintaining adequate liquidity. These non-traditional asset classes are typically far less fungible than most liquid alternative strategies.

We believe that portable alpha provides an avenue for institutional investors to reach for higher returns within core allocation buckets while maintaining the ability to manage and monitor their liquidity profile. Portable alpha strategies can be built with alternative strategies that tend to have better intra-period liquidity and transparency than private assets. As a result, investors can seek to increase overall portfolio return while maintaining adequate portfolio liquidity.

2 How should investors approach managing the "alpha" and "beta" component of a portable alpha framework?

Managing a portable alpha strategy is more complex than a long-only approach because you must monitor both sides of the investment. Although a portable alpha framework splits alpha generation and beta exposure into two distinct mandates, coordination in managing those return streams is key.

Investors can choose to split these roles across two different managers, but we find that a single manager for both components can be beneficial. From the investor's viewpoint, oversight is simplified because there are simply fewer parties involved, which results in fewer moving parts and more consolidated reporting. From the manager's perspective, they can more effectively manage the mandate because they have a holistic view of the entire strategy. This reduces the need for the investor to coordinate between two managers that are not directly communicating with each other. This is especially important if the strategy requires larger cash reserves, rebalancing, or client funding requests. In this case, a single manager can more easily anticipate these issues and quickly act to adjust both sides of the portfolio accordingly. Finally, by having multiple mandates with the same investment firm, the investor can potentially benefit from fee savings across the two allocations.

3 How has the use of portable alpha strategies in institutional portfolios evolved over time?

We have seen a growing interest in portable alpha strategies from many global institutions due to the current low yield and low expected return environment. However, investors may recall that portable alpha strategies had some measure of popularity before the 2008 global financial crisis as well. We believe that there are several missteps the industry took during that time. Namely, many alpha-seeking strategies were in reality just delivering more market beta. And to worsen matters, many beta components of portable alpha strategies did not have adequate cash reserves to handle severe market drawdowns.

As a portable alpha manager for over 14 years, including throughout the entire global financial crisis, we know robust risk management is at the heart of a successful framework. We believe alpha-seeking managers must limit their beta exposure and have a history of delivering uncorrelated alpha. As systematic investors, we are keenly aware of what drives returns in our strategies. Additionally, managers should apply stress tests to determine the size of the cash reserve required to sufficiently cover both mark-to-market moves of the beta index and any potential changes to margin requirements on market-linked instruments. As a provider of both alpha and beta strategies, this consideration is embedded in our investment and risk management processes.

Conclusion

A portable alpha investment framework, or one that effectively separates the alpha and beta components of an allocation, can help investors increase overall portfolio performance and maintain a diversified asset allocation.

In equity portfolios, we believe that portable alpha can help redirect active risk budgets towards areas where alpha may be more abundant—effectively unlocking capital in the largest part of investor's portfolios.

In fixed income portfolios, we believe that portable alpha can seek higher absolute returns while still providing a diversifying return stream with low correlation to equities.

Compared to other illiquid, higher return-seeking alternatives like private equity, distressed debt, and real assets, a portable alpha framework does not significantly deteriorate the liquidity profile of a strategic asset allocation.

We believe portable alpha strategies have become the next logical step in building more capital efficient portfolios that can overcome the challenges of the low yield and low return world we now face.

Sources and endnotes

Past performance is not a guarantee of future results. Index returns are shown for illustrative purposes only. It is not possible to invest directly in an index. Forecasts are based on estimates and assumptions. There is no guarantee that they will be achieved.

1. Source: 2021 US and Canada Institutional Sentiment Survey. Based on 273 respondents from organizations including pensions, endowments and foundations, family offices, insurers, and investment consultants. The survey was conducted in December 2020.

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BLACKROCK SYSTEMATIC INVESTING

A leader in portable alpha strategies

15
Years experience managing portable alpha solutions

$4B
Portable alpha strategy assets under management

$5T
Largest global provider of index and ETF solutions gives expertise on beta management

$10B
Alternatives platform spans asset classes and provides choice in source of alpha

Source: BlackRock, as of March 2021.

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