Insights
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How Enhanced Strategies Can Help You Get More From Your Equity Allocation

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A very simple core/satellite portfolio shows how enhanced funds can help equity investors meet their goals while making efficient use of risk.

As the post-COVID-19 investment landscape takes shape, investors are considering how to extract more from every corner of their equity allocations.

To that end, this piece will explore why a traditional core/satellite approach to equity portfolio allocation may not, in fact, be the most efficient use of a crucial resource: the risk budget. We'll illustrate this by building a very simple core/satellite portfolio in order to explore how enhanced funds can help investors to meet their goals while making efficient use of risk.

Enhanced Equity Strategies, Defined

Enhanced strategies seek to provide modest excess returns consistently over time, while closely tracking the characteristics of their reference benchmarks. Enhanced managers strive to limit performance surprises. At the same time, enhanced strategies must take on a small amount of risk compared to the benchmark, spread across hundreds of securities, in order to gain the potential for outperformance. The State Street Active Quantitative Equity team pursues these objectives in its enhanced strategies through an investment process that includes active stock picking using the group's proprietary stock-selection model.

Enhanced strategies clearly lie between indexed and conventional active strategies in terms of expected risk and expected return; however, there is no single, industry-wide definition of where enhanced funds begin or end on the spectrum. The full range of actively managed approaches, from enhanced through to traditional active approaches, is a continuum. In general, strategies that target tracking error — a measure of active risk[1] — in the range of 50 to 200 basis points on that continuum are considered "enhanced."

Striving to Make Efficient Use of Risk

Enhanced strategies are designed to be extremely efficient in their use of risk. The space they aim to occupy in terms of expected risk and return is a kind of "sweet spot," where each unit of incremental risk added has the potential to yield the greatest return.

This attribute can be useful to investors as they pursue their goal of generating as much excess return as possible while keeping risk tolerable. Whether the focus is on maximizing return for a given level of risk, or minimizing risk for a given level of return, understanding the trade-off between risk and return is critical.

The Information Ratio

A useful measure of what is sometimes called the *risk budget* — that is, how efficiently a given portfolio is 'spending' risk to gain excess returns — is the *information ratio*:

Information ratio (Efficiency) = Excess returns/Active risk (Tracking error)

In this formula, "excess returns" are measured as returns above the reference benchmark, while "active risk" is measured in terms of *tracking error* (which quantifies the divergence between a fund's returns and those of its benchmark). Actively managed funds by definition seek to diverge from the benchmark, in that they seek outperformance. The greater the active risk a fund takes on in its quest for outperformance, the greater its tracking error is likely to be.

Portfolios with higher information ratios have historically produced more excess return per unit of active risk than those with lower information ratios. Put another way, the higher the information ratio, the more efficiently the portfolio has "spent" risk in order to generate excess returns.

The first incremental additions of risk have the potential to yield the greatest returns per unit of added risk. As a fund takes on more risk, the corresponding return potential tends to diminish — hence the unique efficiencies that enhanced funds can be capable of achieving.

The Typical Core/Satellite Approach

Investors pursuing a typical core/satellite approach to equity portfolio allocation generally build the core using indexed funds and build the satellite out of higher tracking-error actively managed funds. We believe this is not the most efficient use of a portfolio's overall risk budget.

In this example of a core/satellite portfolio, we limited the categories of potential investments to four: indexed (with active risk, measured as tracking error, of 0.05%), enhanced (tracking error of 2.00%), standard active (tracking error of 5.0%)[2] and highly active (tracking error of 6.5%).

In addition, to keep the analysis conservative, we assumed that there is *no difference* between the efficiency of enhanced strategies and that of other active strategies. We captured this assumption by equalizing the information ratios for the two active strategies and for the enhanced strategy, even though one would expect enhanced strategies in general to exhibit higher information ratios.

Using these assumptions, we built a simple core-satellite portfolio to serve as our base case, allocating 50% to indexed investments and 25% each to standard active and highly active funds, with no allocation to enhanced. The resulting portfolio is expected to outperform the S&P 500 benchmark by 86 basis points, with a tracking error of 2.05%, for an information ratio of 0.42 (see Figure 1).

Figure 1
A Simple Core/Satellite Portfolio

Large Cap U.S. Equity Strategy Type	Allocation (%)	Excess Returns (%)	Active Risk (Tracking Error) (%)	Efficiency (Information Ratio)
Passive	50	0.00	0.05	0.00
Enhanced	0	0.60	2.00	0.30
Active	25	1.50	5.00	0.30
Highly active	25	1.95	6.50	0.30
Total Portfolio	**100**	**0.86**	**2.05**	**0.42**

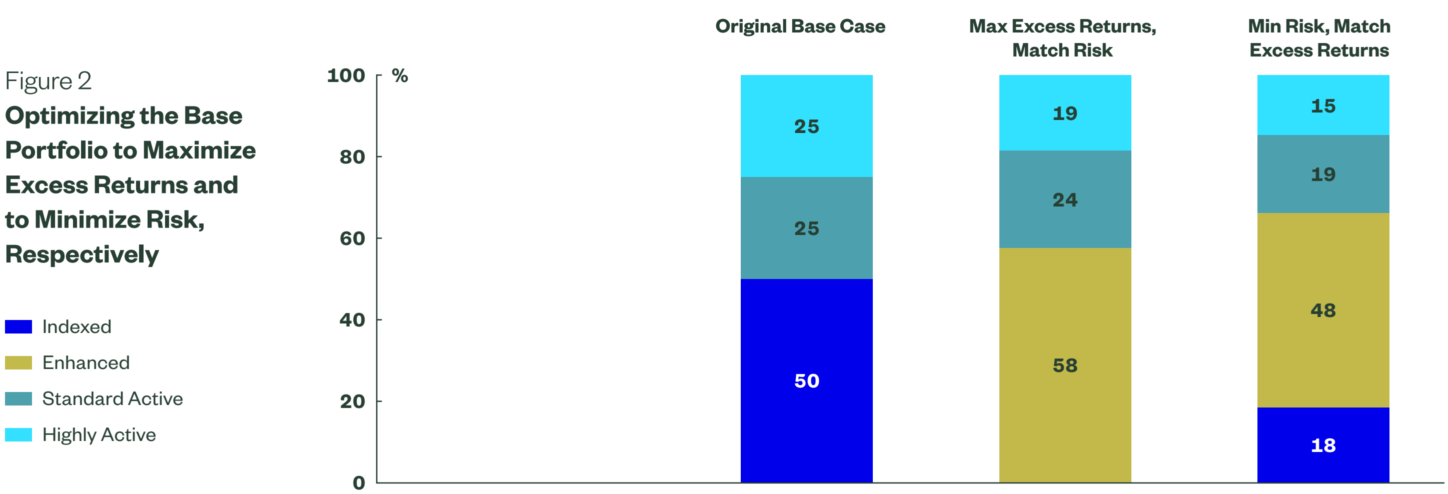
Source: State Street Global Advisors analysis.

Spending Risk Budget More Wisely

This opened the question: Can investors spend their risk budgets more wisely? To answer this question, we used the same assumptions to explore how allocations to each strategy could be optimized to achieve greater efficiency, as measured using the information ratio. Ultimately, we investigated how equity portfolio allocations could be optimized to produce more excess returns at lower risk.

Maximizing returns using the same risk allocation First, we sought to answer the question from the *return* perspective, by maximizing the portfolio's excess returns while keeping risk constant compared to the original, base-case portfolio. We found that enhanced strategies should play a leading role with 58% of the optimized portfolio, replacing indexed strategies as the portfolio's core (see Figure 2.) In this scenario, the expected excess returns increased from 86 to 107 basis points, while risk remained the same at 2.05% tracking error. As a result, the portfolio's overall efficiency, as measured by the information ratio, increased from 0.42 to 0.52.

Figure 2
Optimizing the Base Portfolio to Maximize Excess Returns and to Minimize Risk, Respectively



Total Portfolio	Original Base Case	Max Excess Returns, Match Risk	Min Risk, Match Excess Returns
Excess Returns (%)	0.86	1.07	0.86
Active Risk (Tracking Error) (%)	2.05	2.05	1.66
Efficiency (Information Ratio)	0.42	0.52	0.52

Source: State Street Global Advisors analysis.

Minimizing active risk to achieve the same returns Next, we sought to answer the question from the *risk* perspective, by minimizing the portfolio's risk for a given level of return. In this case, indexed investments regain a small allocation (18%), due to their risk-control characteristics, but enhanced strategies still represent the largest proportion of the portfolio (48%). Weights in standard active and highly active strategies are represented at slightly lower levels in this risk-minimization case (19% standard active, 15% highly active), compared with the excess-return maximization scenario (24% active, 19% highly active). The risk reduction realized in this case is substantial, declining from 2.05% tracking error to 1.66%. As in the excess-return maximization scenario, overall efficiency represented by the information ratio increased from 0.42 in the base case to 0.52 in the risk-minimization case.

This uptick in the information ratios of each optimized portfolio compared to the original base-case portfolio indicates that they are each substantially more efficient than the base-case scenario, with the potential to reap greater rewards per unit of risk. What we found interesting — and what many investors may find surprising — is just how large an enhanced allocation this framework suggests. Our research suggests that enhanced funds can indeed help investors meet their goals while making more efficient use of risk.

Endnotes

1 Active risk is the risk generated by a manager's efforts to beat the returns of a reference benchmark.

2 Due to market frictions, indexed funds generally exhibit low levels of tracking error — that is, their results do tend to diverge to a small degree from their reference benchmarks.

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Glossary

Information ratio The information ratio (IR) measures portfolio returns and indicates a portfolio manager's ability to generate excess returns relative to a given benchmark

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