

The Benefits of Optimization

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When it comes to achieving your financial goals, we have found that a repeatable and disciplined process is critical to your long-term success.

Managing risk is a key component of a repeatable investment process, and optimization is a valuable tool for doing so. The objective of optimization is to create efficient combinations of assets that offer the greatest potential return for the least amount of risk. This, however, is not as simple as it may sound.

The key to optimization is to recognize that it is easier to achieve efficiency by combining assets rather than isolating them. It is the one free lunch you get in investing and, regrettably, the most underused source of performance enhancement. Having said this, it is also one of the key advantages that a managed wealth platform has over a single manager.

The Risks of a Single Manager

It is entirely possible that a typical money manager may beat the market 55 per cent of the time or less. However, combinations of money managers can beat the market more consistently - 60 per cent, 65 per cent or even 70 per cent of the time.

This consistency is important because of the power of compounding. To outperform the market, you want to compound a series of positive returns. Why? Because compounding a positive return with a negative return doesn't improve your overall return. That is why effective portfolio risk management is intrinsic to the optimization process.

Risk is the volatility of your return or, to put it another way, the chance of compounding a positive return with a negative one. Negative returns or "risk drag" explain why volatile managers underperform for extended periods of time.

Optimization reduces unnecessary risk drag by neutralizing unwanted types of risk. Take, for example, a volatile U.S. growth manager who specializes in small-cap stocks. Under favourable market conditions, the money manager would generate returns that exceed the overall market. However, when growth stocks or small caps stocks go out of favour, as they have historically done, the same money manager would trail the market.

In light of this cycle, it is fair to say that, over the long term, this manager will have a low batting average relative to the broad market because of inherent style and capitalization risk. No matter how good the money manager is, he or she will always underperform when their investment style or chosen market capitalization is out of favour.

What if we could neutralize the style risk and the capitalization risk and preserve the alpha this manager contributes from stock selection?

By adding a complementary money manager with offsetting style and capitalization characteristics to the same portfolio, we can reduce the style and capitalization risks that we were exposed to with a single money manager.



This is the key concept behind optimization. Portfolio optimization allows us to identify which aspects of risk have a good track record of adding value, and which do not. In other words, we can effectively determine how much risk drag the portfolio has and also identify the bets that we do and do not want to take by differentiating between high and low conviction bets. Bets are simply managed or unmanaged risk. By using optimization techniques, we can identify and preserve intended bets (high conviction or good risk) and neutralize or diversify unintended bets (low conviction or bad risk)

This represents a key advantage for a managed wealth program. Single managers do not have access to offsetting management styles to manage portfolio risk. Their balanced portfolios will typically have more risk drag, more unintended bets and less consistent performance than an optimized multi-manager portfolio.

As our third party investment management consultant for the Summit and Pinnacle Programs, Northern Trust Global Advisors looks for powerful money manager combinations. No money manager is selected for the Programs in isolation. They are selected to complement and offset the style, capitalization and investment philosophy of the other money managers that have been selected.

How do you avoid “Deworsification”?

Deworsification happens when you combine money managers that exactly offset each other in a portfolio, effectively eliminating each other’s contribution to performance. That would be an example of a weak money manager combination.

Optimization is about exploring powerful combinations. Money managers with opposing styles (or low correlations) may still have common characteristics, such as a solid track record of adding value from stock selection. Combining these managers can neutralize a style bet and add alpha from stock selection. As a result, you get the best of both worlds - increased return and lower volatility.

It is precisely this type of scenario that Northern Trust looks for when it conducts searches for money managers. They want money managers who, in combination, improve your market upside-capture and reduce your downside-capture relative to what you could achieve through a single money manager alone.

How do you optimize a portfolio?

Northern Trust has a number of powerful optimization programs that it employs to evaluate money manager combinations, including a statistical calculator that performs regression analysis of various groupings of money managers against a pre-specified market benchmark. The calculator looks for the combination of money managers that provides the most outperformance for the least amount of volatility or risk. This is called mean/variance optimization and it is widely used in the portfolio management industry.

Having said this, it is important to keep in mind that this type of evaluation is really a rearward looking analysis. It only tells you which grouping of money managers would have outperformed in the past. Think of it as driving through the rearview mirror. At the end of the day, while the information can be useful, it is also limited. As we all know, there is no guarantee that the future will replicate the past.

To address this risk, Northern Trust takes a more holistic approach, recognizing that it is important to optimize on other factors instead of past performance alone. They use a sophisticated, internally developed portfolio construction tool called “Cosmic” to optimize on other characteristics or combinations of characteristics.



This allows them to look at things like interest rate sensitivity, or inflation sensitivity, downside risk, upside capture, and absolute versus relative return objectives. This provides much more robust optimization than would otherwise be available. They can identify which characteristics in a portfolio contribute to consistent performance and which characteristics only increase volatility.

After conducting numerous optimizations over many years, Northern Trust can make a number of observations about what types of risks are good risks and what types of risks are bad risks. In general, it is difficult to add value consistently taking short-term style bets or capitalization bets in a portfolio. The persistence of these factors is negligible compared to the risk drag they introduce to the portfolio.

For this reason, you will see the Summit and Pinnacle Optimized Portfolios avoid significant style or capitalization bets. Overall, the Portfolios have no value or growth biases, nor do they have a large cap or small cap tilt. Stock selection skill, on the other hand, is a more consistent source of value.

In light of this fact, Northern Trust prefers to optimize a portfolio using money managers who have a demonstrated track record of adding value from stock selection (as opposed to sector rotation or style drift). By using specialists with different styles and capitalizations, and then optimizing the manager mix and weighting, they can neutralize risks in areas where the optimizer demonstrates a low conviction of success and retain risk in areas where the optimizer demonstrates a higher conviction of success.

For a Portfolio, this manifests in a tighter distribution of alpha versus the market and a reduction in the nerve-wracking style or capitalization swings that can trigger emotional and poorly timed investment decisions.

The Bottom Line

Northern Trust's disciplined, repeatable optimization process is central to the Summit and Pinnacle Optimized Portfolios. At the same time, the process is revisited annually to determine if different money manager combinations can increase efficiency.

The specific attention paid to money manager selection to identify powerful money manager combinations for Pinnacle and Summit is really what makes these Portfolios successful. After all, no matter how powerful your optimizer, like any computer application, garbage in equals garbage out. It is for this reason that single money managers have difficulty competing with a well-designed multi-manager portfolio. It is also a key reason why pension plans and other sophisticated institutional investors rarely use a single money manager.

To find out more about the Optimized Portfolios, please contact us.

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