

The prevailing wisdom in the investing world holds that diversification and asset allocation are the best approaches to creating portfolios that seek to maximize risk-adjusted returns. However, this is only part of the story.

In 1952, Harry Markowitz published “Portfolio Selection,” at the time a revolutionary paper that laid the groundwork for what became known as Modern Portfolio Theory (MPT). MPT holds that, investors can “diversify away” some of the risk associated with holding individual stocks by investing in a diversified basket of securities with a wide range of risk, return and correlation profiles. This type of diversification is meant to reduce unsystematic risk (the risk of any individual holding), however the resulting basket of securities is exposed to systematic risk, also known as “market risk.”

If an investor is attempting to create a diversified, risk-tolerance based portfolio, it's best to think of the components as asset classes, rather than individual stocks, although the math involved remains the same. Using this approach, an investor chooses the asset classes she wants exposure to, and uses those classes' current risk/return/correlation profiles, known as capital market assumptions, to create the optimal portfolio for the current environment. For example, an investor seeking to follow the MPT approach and obtain diversified exposure to the market might hold in her portfolio a mix of equities (stocks), fixed income (bonds), commodities (hard assets such as gold or soybeans), and currencies (cash). Each of these asset classes possess varying risk/return/correlation profiles and will tend to react differently to evolving market conditions. The diversified basket the investor creates can only be said to be “optimal” based on the investor's assumptions regarding current market conditions and the resulting capital market assumptions of the individual asset classes. These profiles are then used as the inputs for creating the set of optimal portfolios, which is known as the efficient frontier.

There is a problem here though: risk/return/correlation profiles for individual securities and asset classes are not static—they shift over time. They are also very accuracy-dependent, as small changes in the MPT equation's inputs tend to have dramatic changes in its output. So, a small change in the expected return in one class could have a dramatic effect on the “optimal” weight of that class in the diversified basket.

Over the long term, assumptions regarding various asset classes' risk/return/correlation profiles will tend to fall in line with historical numbers, but over the short term, the actual results can vary greatly from the data used to create a portfolio in the first place. It may be unsurprising to learn that this approach can prove especially problematic for investors whose time horizons do not fit with the 30 or 40 year historical numbers most asset allocators use as risk/return/correlation data to create these portfolios.

For example, while the average longer-term return of Large Cap US equities may be 7 or 8%, the next 3 years could be dramatically higher or lower. So, an investor needs to understand the assumptions used in the creation of the diversified portfolio they are being offered and how it fits into their own personal time horizon. While markets do tend to recover over the long term after deep drawdowns, investors may not begin seriously investing until middle age, and often do not have the luxury of a sufficiently long time horizon to regain what they have lost in the market. In other words, the shorter an investor's time frame, the more random the potential investment outcome, and the greater the likelihood that diversification alone isn't enough.

Although these challenges may appear substantial, there is an approach that can provide the benefits of diversification without some of the drawbacks of portfolios that are created based on longer-term assumptions which may not necessarily reflect the current market environment. This approach, which is well-suited to investors with shorter time horizons, is known as tactical asset allocation, and may provide a way forward.

Tactical management seeks to solve the problem of fluctuating risk/return/correlation profiles by shifting portfolio weightings to take new information into account. Ultimately, this approach can result in a more resilient portfolio, one that is better able to weather bear markets and drawdowns, while maintaining investors' desired risk/return profiles.

Although Markowitz could never have predicted the far-reaching impact his research would have when he published it in 1952, Modern Portfolio Theory can still benefit today's investors within a tactical framework that seeks to continually optimize portfolio weightings with new, forward looking risk/return/correlation information.