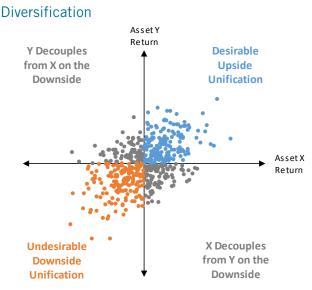


Is Diversification a Myth?

Why diversification tends to linger when you don't need it and disappear when you do

An old saying, which has been attributed both to Mark Twain and Robert Frost, describes a banker as "a fellow who lends you his umbrella when the sun is shining but wants it back the minute it begins to rain." Whatever your view of bankers, you may have noticed that diversification behaves the same way. You want it when the main growth engine of the portfolio—usually domestic equities—is tanking. Unfortunately, this is when it tends to disappear. There are also plenty of times when you don't want diversification at all. When times are good, you'd be happy for all of your assets to go up together. But, like an uninvited guest, this is when diversification likes to turn up.

To make matters worse, some popular methods that investors use to detect correlation asymmetries are completely wrong because they ignore the periods where diversification actually does its job. We propose that



Sometimes Unification Is Preferable to

For illustrative purposes only. Source: State Street Global Markets

investors measure what matters: the degree to which a given asset diversifies the main growth engine when it underperforms. This approach yields starkly different conclusions compared to some prior studies of this issue, particularly for asset pairs that have low correlation to begin with. In most cases, we find that correlation asymmetry is in the wrong direction and is therefore undesirable to investors. But there are exceptions, and by holding more of these assets, investors can reduce undesirable correlation asymmetry in the portfolio.

Why bother? The goal of investing is to grow wealth, not to reduce correlation asymmetry. It turns out that by reducing undesirable correlation asymmetry in the portfolio, investors may reduce the frequency and size of large drawdowns. All else equal, this can protect and grow wealth. But traditional portfolio construction tools—which assume distributions are well-behaved and correlations are symmetric—are blind to this issue. In this paper, we show how to use a portfolio construction tool called full-scale optimization to construct portfolios that exploit correlation asymmetries to reduce risk. Rather than reallocating the portfolio dynamically in anticipation of drawdowns, investors who pursue this approach seek to prepare rather than predict. They build portfolios as one might design a house on the seashore: for routine use during balmy conditions but sufficiently resilient to weather a hurricane if one should strike. This requires that the designer strike an optimal balance between resilience to storms and utility during fair weather conditions. A windowless, concrete bunker would provide maximum protection but would not be particularly appealing on a sunny day.

For more on this topic, see our 2021 journal article: **"The Myth of Diversification Reconsidered"** by William Kinlaw, Mark Kritzman, Sébatien Page, and David Turkington, The Journal of Portfolio Management, Vol. 47, No. 8, August 2021.

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