Fifty years of broad-based international data: What have we learned for asset allocation?

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Abstract

Much of the seminal work on international investing in the context of asset allocation and mean variance optimization was written based upon a somewhat limited broad-based data set. With just over 50 years of MSCI data now in hand, we reexamine the characteristics of the data with subsets for the first 25 years and latest 25 years plus, also utilizing the earlier historical data to create an efficient portfolio to evaluate out of sample. This evaluation is in the context of a variety of assets in an asset allocation framework, utilizing both asset-only mean variance optimization and some surplus optimization analyses. We evaluate international equity assets in hedged local currency terms and unhedged USD terms.

We find that there is a measurable index sector composition difference among various country indices, consistent with economic theory of specialization and rising global trade, which offers potential benefits to international diversification. We also find that the US returns have dominated in almost all index sectors in both local currency and US dollar terms based upon the available economic sector data, which is more short-lived. Additionally, there has been a noticeable trend in country return covariance behavior, with underlying local index equity returns increasing in correlation over time, along with a decrease in the correlation benefit of currency volatility over the same timeframe. International equities have provided lower returns with higher volatility for the US-based investor in the later data subset and do not show up in the efficient frontier set out of sample.

Despite these observations and potential drawbacks, we demonstrate that a diversified asset mix with sizeable international representation performs relatively well in both data subsets (in sample and out of sample) and that substantial international diversification remains a reasonable ex ante strategy. We conclude, however, that the optimal allocation to international assets for US investors—those with local, dollar-based cashflow liabilities to defease—is likely less than the global, market-neutral allocation that is often used as a baseline in global mandates.

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