Matching Sources of Returns to Desired Outcomes

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Central Issue of the Paper

Traditional asset allocation methods don't work well with alternative assets. This is because when alternative assets are included in a stock/bond portfolio they don't fulfill requirements of an asset class factor model: 1) mutually exclusive assets, 2) exhaustive coverage of securities, and 3) asset classes each having returns that differ.

In "Alternative Alphas and Asset Allocation," Masao Matsuda argues that there is an artificial boundary between traditional asset classes and alternative assets. Yet by focusing on risk factors that are return drivers this boundary disappears. He maintains that each investment product resides somewhere along a continuum of market betas, alternative betas and alphas. This can be seen by viewing the products in terms of their risk management complexity.

The author proposes an alternative approach to asset allocation among traditional and alternative assets. The approach looks at three components of returns: systematic equity risk, orthogonal risk factors, and alphas.

Approach Employed by Paper

The author first demonstrates that alternatives to US equities and bonds don't fulfil the requirements for an asset factor model. He does this for foreign equities arguing that if they are to be considered an asset class distinct from US equities, then the correlations within various EAFA groups should be higher than correlations with non-EAFA countries. In each of the five groups, the in-group correlations were lower than the correlations of certain EAFA groups with other EAFA countries as well as with US equities. The same argument is then made for commodities.

Next the difficulty of estimating asset class parameters is discussed. Expected returns are notoriously difficult to estimate, yet correlations are also non-stationary. The author illustrates this

with a graph of the correlations between stocks and bonds over time from the 1930's to recent times that flips from highly positive to highly negative then to over a positive 0.70 in the 1990s and back to negative 0.80 most recently. Such weaknesses stemming from reliance on a single factor model are mitigated with a multi-factor model: "Factor investments are free from artificial demarcation of asset classes based on traditional or expediency." Reasons are two-fold. First the approach does not attempt to diversify away all systematic risk leaving one relevant index but deals with factors directly. Theoretically any asset return can be determined by a set of factors. Second there is no attempt to estimate the expected return of each factor.

Findings of the Paper

An asset allocation framework is developed that is not focused on weights of asset classes but is rather determined by three components of returns.

Exposure to the first component, equity systematic risk, can be obtained with a passively managed ETF. The exposure is determined relative to the risk factor of other premiums rather than as a weight allocated to equities. There may be equity exposure in the other components.

The second component, orthogonal risk factors, should consist of risk factors that are uncorrelated to each other. Risk premia factors have been well researched and fulfill this requirement. The momentum risk premium is available across a range of asset classes (equity, fixed income, currencies, and commodities). The credit risk premium is available primarily in the fixed income market. Similarly roll yield as a risk premium can be obtained from commodities.

The third component consists of alternative alphas. There are five sources of alpha which come from skills applied to: 1) control risk factors, 2) adjust beta exposure dynamically, 3) extract a liquidity premium, 4) deliver true alphas and 5) generate uncorrelated returns. Again, these can be obtained across asset classes.

How are weights to the components determined? It depends on the desired outcome.

One desired outcome is inflation protection and real return, and a way to achieve this is through some alternative alphas available in commodities and real estate.

A second type of desired outcome is volatility and risk management, and a way to achieve this is through some "combination of equity systematic risk and alternative alphas adjusted dynamically to beta exposure."

A third type of desired outcome is equity risk diversification and market neutrality. A way to achieve this is through "orthogonal risk factors used in combination with another source of alternative alphas derived from the generation of uncorrelated returns."

A fourth type of desired outcome is alpha opportunities from expanded sources of returns. A way to achieve this is through the "exercise of a variety of skills by alternative investment managers in generating alternative alphas."