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SUMMER SESSIONS

Refresh your knowledge of essential topics in investing

Asset Allocation: From Theory to Practice and Beyond, Part II – Fallacies Presented by David Turkington

Key Points

- Asset allocation is important but is not the primary driver of portfolio performance.
- Longer time horizons do not reduce risk, but they do provide more flexibility.
- Input errors may alter which assets are selected when performing portfolio optimization, but they have little impact on the optimized portfolio's performance if the assets are close substitutes.
- Factors do not provide superior diversification benefits than assets.
- Flexible policy portfolio weights better reflect investor preferences.

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Asset allocation has many misconceptions, which are widespread and repeated often. In part two of our asset allocation series, David Turkington debunks five of these fallacies:

Fallacy 1: Asset allocation determines more than 90% of performance. This argument originated in an influential article by Brinson, Hood and Beebower (BHB).¹ They concluded that asset allocation was far more important than security selection in explaining investment performance. However, their analysis was flawed because BHB confounded the decision to invest with the decision to deviate from a “default” asset mix. When these decisions are properly decomposed, the decision to invest explains the majority of performance, followed by security selection and asset allocation.

Fallacy 2: Time diversifies risk. Paul Samuelson showed that this logic is a misuse of the law of large numbers.² Even though the probability of loss decreases with time, the worst-case scenario compounds downwards. This concept is also illustrated by within-horizon risk, which is the probability of a given loss occurring at some point within an investment horizon. Within-risk always increases with time.

Fallacy 3: Optimized portfolios are hypersensitive to input errors. Rather than focusing on optimized portfolio weights, investors should focus on a portfolio's expected outcomes. If assets are close substitutes, misallocations have little impact on a portfolio's return distribution. If assets are not close substitutes, misallocations are less likely.

Fallacy 4: Factors offer superior diversification benefits. In reality, the true reason that factors have low correlations is because they often contain short positions in the underlying assets. Given the same constraints

and the same investible universe of assets, it is mathematically impossible to regroup assets into factors and produce a better efficient frontier.

Fallacy 5: Policy portfolios balance return and risk effectively. In fact, static allocations cannot properly describe investor preferences when the underlying assets are changing throughout time. Alternatively, investors should consider a flexible policy that adjusts exposure to assets as their properties evolve through time.

¹ G. P. Brinson and L. R. Hood and G.L. Beebower. 1986. "Determinants of Portfolio Performance," *Financial Analysts Journal*, vol. 42, no. 4 (July/August).

² P. A. Samuelson. 1963. "Risk and Uncertainty: A Fallacy of Large Numbers," *Scientia*, 98 (April/May).

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