

Constantly Rebalanced Portfolios – Is Mean-Reverting Necessary?

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Abstract

One of advantages of adopting multi-period portfolio models is improved investment performance via the fixed mix rule, which is called rebalancing gains or volatility pumping. Due to its similarity to the “buy low, sell high” strategy, it is often misunderstood that it requires mean-reverting processes for assets. In this paper, however, we show that mean-reversion is not necessary to benefit from the fixed mix rule, via a simple multi-dimensional geometric Brownian motion. We also list practical examples which are successfully implementing the rule in the domain of equities, commodity futures, alternative investments, and momentum strategies.