PORTFOLIO CONSTRUCTION

Leveraged Exchange-Traded Funds: Admissible Leverage and Risk Horizon

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In view of the increasing popularity of exchange-traded funds (ETFs) and their leveraged counterparts (LETFs), the authors assert that it is important for investors to better understand and rigorously quantify the risk involved.

This paper provides a quantitative risk analysis of LETFs with an emphasis on the impact of leverage and investment horizon. A number of market observations suggest that value erosion is more severe for highly leveraged ETFs.

To test that hypothesis, the authors compare the empirical returns of several major LETFs based on the S&P 500 index against multiples of the unleveraged ETF. They find that the performance of LETFs generally declines as investment horizon increases, and even more visible for higher leverage ratios. This motivates the analysis on the risk impact of leverage as well as risk horizon.

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