Leveraged Exchange-Traded Funds: Price Dynamics and Options Valuation

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This book provides an analysis, under both discrete-time and continuous-time frameworks, on the price dynamics of leveraged exchange-traded funds (LETFs), with emphasis on the roles of leverage ratio, realized volatility, investment horizon, and tracking errors.

This research provides new insights on the risks associated with LETFs. It also leads to the discussion of new risk management concepts, such as admissible leverage ratios and admissible risk horizon, as well as the mathematical and empirical analyses of several trading strategies, including static portfolios, pairs trading, and stop-loss strategies.

The final part of the book addresses the pricing of options written on LETFs. The authors provide a no-arbitrage pricing approach that consistently value options on LETFs with different leverage ratios with stochastic volatility and jumps in the reference index.
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