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CPPI Method with Conditional Floor: The Discrete Time Case

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Abstract : We propose an extension of the CPPI method, which is based on conditional floors. In this framework, we examine in particular the TIPP and margin based strategies. These methods allow keeping part of the past gains and protecting the portfolio value against future high drawdowns of the financial market. However, as for the standard CPPI method, the investor can benefit from potential market rises. To control the risk of such strategies, we introduce both Value-at-Risk (VaR) and Expected Shortfall (ES) risk measures. For each of these criteria, we show that the conditional floor must be higher than a lower bound. We illustrate these results, for a quite general ARCH type model, including the EGARCH (1,1) as a special case.

Keywords : CPPI, conditional floor, ARCH, VaR, expected ehortfall
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