

Dipartimento di Statistica e Metodi Quantitativi

Giovedì 21 gennaio 2016 ore 11.00

(edificio U7, 4° piano, stanza 4026)

Via Bicocca degli Arcimboldi, 8 – 20126 Milano

“Suboptimality in portfolio CVaR optimization”

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Abstract

We consider the portfolio optimization problem with conditional value-at-risk as the objective. Summarizing commonly used methods of solution, we note that the linear programming approximation is the most generally applicable and easy one to use (the LP uses a Monte Carlo sample from the true asset returns distribution). The suboptimality of the obtained approximate portfolios is then analyzed using a numerical example, with up to 101 assets and Student-t distributed returns, ranging from light to heavy tails. The results can be used as an estimate of the portfolio suboptimality for more general asset returns distributions, based on the number of assets, tail-heaviness, and the fineness of the discretization. Computation times using different techniques available in the literature are also analyzed.

Tutti gli interessati sono invitati a partecipare

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