

EXACT AND APPROXIMATE BOUNDS FOR PORTFOLIO ANALYSIS

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A Stochastic Bound is a portfolio, constructed from a given set of base assets, which statistically dominates all feasible alternatives. In a range of applications in portfolio theory and assets pricing, it is useful to test for the existence of bounds and/or to identify an exact or approximate bound. For this purpose, feasible approaches to statistical inference and numerical optimization are developed. Various financial applications are explored: (1) testing the efficiency of a latent market portfolio; (2) diagnosing alternative factor model specifications; (3) engineering an active enhanced indexing portfolio.

Keywords: portfolio analysis, stochastic dominance, subsampling, linear programming.

JEL classification: C61; D81; G11.

The full working paper can be found [here](#).