## Portfolio Optimization based on DARA Stochastic Dominance

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An optimization method is developed for constructing investment portfolios which stochastically dominate a given benchmark for all decreasingabsolute risk-averse investors, using Quadratic Programming. Primal and dual formulations for a pairwise comparison are presented as well.

In applications to a range of data sets of historical returns to active equity benchmark portfolios, the Mean-Variance efficient frontier is shown to includemany suboptimal portfolios. The proposed optimization method can improve upon the performance of the Mean-Variance portfolios by tens of basis points per annum in many cases. The performance improvementscritically depend on imposing Decreasing Absolute Risk Aversion instead of more commonly used the second- or third - order stochastic dominance constraints.