

Loss-Aversion with Kinked Linear Utility Functions  
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**Abstract**

Loss-aversion is a phenomenon describing asymmetric attitudes with respect to gains and losses where investors seem to show considerably stronger aversion to losses than the attraction of gains; i.e., investors are particularly sensitive to losses and eager to avoid them. We present a method that efficiently solves the problem of maximizing the expected bilinear (loss-averse) utility function. At first we formulate the optimality conditions for general bilinear utility functions then we introduce an efficient algorithm and in addition propose a degeneracy resolving rule. Then we describe the numerical results when applying our algorithm to a series of four asset problems in which the degree of loss-aversion is increased. Finally, we provide a direct link between piece-wise linear programming problem and the conditional value-at-risk, which is a downside risk measure.