Abstract

This thesis analyses the in sample performance and the out of sample performance before and after transaction costs of Mean-Variance, Global-Minimum-Variance, behavioral and Lower-Upper-Partial-Moment (LUPM) portfolios, which are derived under no, short-sale, L1 and L2 constraints as well as by applying the covariance shrinkage approaches of Ledoit and Wolf (2004) and Behr et al. (2010). In this thesis I try to find out if behavioral portfolios are able to outperform equally constrained Mean-Variance ones with respect to Sharpe Ratios and loss aversion coefficients. Furthermore, I compare the best performing behavioral, Mean-Variance and LUPM portfolios with each other. I find that, before transaction costs, depending on the behavioral value function and data set being analyzed, the the short-sale, L1 and L2 constrained behavioral portfolios perform out of sample equally good or slightly better and in the unconstrained case equally good or worse than the respective Mean-Variance ones. After transaction costs, however, the behavioral portfolios perform out of sample equally good or worse than the respective Mean-Variance ones. In sample, though, for both data sets, the Mean-Variance portfolios are as good as the equally constrained behavioral ones. The highest Sharpe Ratios and loss aversion coefficients are in sample achieved by the unconstrained portfolios as there is no estimation error problem. Out of sample, however, where an estimation error can have a strong negative impact on the performance of a portfolio, I find that the L2 constrained portfolios of a given model are, before and after transaction costs, always among the best.