Systems Analysis Laboratory, Helsinki University of Technology Mat-2.153 Multiple Criteria Optimization

Punkka/Liesiö

## Assignment 6

Consider the problem in Assignment 4. Find the ideal objective vector  $(z_1^*, z_2^*)$  and formulate a **mixed integer linear** programming (MILP) model that solves the weighted Tchebycheff problem

$$\min_{x \in S} \max_{i=1,2} w_i |f_i(x) - z_i^*|.$$

Find a weight vector for each Pareto-optimal portfolio such that the portfolio is a solution to the weighted Tchebycheff problem.