

Portfolio optimization problem is a classical optimization problem, where the expected return of the portfolio is maximized and the risk is minimized.

In this bachelor thesis some LP solvable portfolio optimization models are studied. Application on real life financial data is also included. Model with Conditional Value at Risk, MAD-model and Minimax model are described. In numerical analysis data from Frankfurt Stock Exchange are used and optimization has been made by Wolfram Mathematica 9.0 function LinearProgramming. As a result we got optimal portfolios for eleven different models for each of six minimal expected return constraints. The portfolios have been then evaluated according to the data from next year period.