Review of Diploma Thesis

Title: Portfolio Optimization under Mean-Variance Framework

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Portfolio optimization is essential and permanently repetitious task within asset management. For that reason, the theme of the thesis may be considered relevant and well chosen.

The aim of the thesis is "to perform ex-post analysis of portfolio different optimization problems, which arise from different risk attitudes". Actually, the author only compared some features of portfolios and no analysis was performed. In addition, it is questionable how the different risk attitudes are considered.

The thesis is divided into five chapters. The first one is introductory, the second and third sections describe the methodological framework and the fourth chapter presents the results. The last chapter concludes the work.

The text is well structured and figures are described sufficiently. However, solution is not apparent in the some parts of thesis. For instance, which optimization problems were actually solved (vague reference into theoretical part is not sufficient), whether the portfolio is rebalanced in each period etc. Graphical presentation and referencing are sufficient.

The various risk attitudes are not considered in the application part properly. It is not defined which approach represents given investor's risk attitude. In addition, the student did not conclude which approach is better for given investor's risk attitude. Anyway, there is a very interesting issue which could be explained in further details if the thesis were defended. **How is it possible that minimum variance portfolios generated greater wealth than the maximum return portfolios when the higher return is generally related to the higher undertaken risk?**

However, in my opinion, this thesis represents rather seminar work than ordinary diploma thesis. In addition, the purpose of this comparison is disputable and any analysis is missing. It is also necessary to note that the significant part of conclusions was not derived
from the results and were copied from the other text, for instance: “This creates the need...desired portfolio of projects” (p. 54). Therefore, I do not recommend the work to the defence.

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