

Master's Thesis Structure

0. Abstract

1. Introduction

1. Motivation
2. Contribution to the Literature

2. Literature Review

1. Portfolio optimisation (Markowitz, BL, CM estimates)
2. Estimation of HD Covariance Matrix
 1. Other methods (factor,)
 2. Shrinkage methods
 1. Individual papers
 2. Review of comparison works on shrinkage estimators

3. Theory

1. Financial Theory
2. Statistical Theory
 1. Description of the Studied Covariance Estimators
 1. Precision Metrix
 1. Graphical Lasso
 2. Ridge
 2. Covariance Matrix
 1. Abadir
 2. Auto-encoders
 3. LW ()

4. Empirical Study

1. Data description
 1. 672 stocks from CRDS
 2. 100 PTF from Kenneth
 3. COVID Period
2. Methodology
 1. Description of the Portfolio Strategies
 2. Parameter choice
 3. Optimisation
3. Results - Out of Sample Evaluation
 1. Considered Performance Measures
4. Analysis of the Results

5. Conclusion

6. References