Math 420, Spring 2017
Seventh Team Homework

due Tuesday, 2 May, 2017

In the following exercises consider the risky assets in groups (A) and (B) of your final project.

Exercise 1. Consider one-year histories of daily share price data for each asset over the years ending December 31 of 2012-2016 and use uniform weights. Assume that μ_{si} is the US Treasury Bill rate at the end of the given year. Assume you are an investor who chooses $\chi = 0$. Design the optimal long portfolios with risky assets drawn from group (A), from groups (A) and (B) combined, and from groups (A), (B), and (C) combined. How well did these optimal long portfolios actually do over the subsequent year?

Exercise 2. Repeat the above exercise for an investor who chooses $\chi = 1$. Compare these optimal long portfolios with the corresponding ones from the previous exercise. Explain the differences you see in their performances.