

Math 420, Spring 2019

Fourth Team Homework

due Thursday, 4 April, 2019

In the following exercises consider the risky assets in groups (A), (B), and (C) of your Project Two. For each asset consider its daily return history $\{r(d)\}_{d=1}^D$ over the five year period 2014-2018. There are twenty quarters in this five year period.

Exercise 1. For each asset compute ω_{cor} for each quarter. Plot ω_{cor} as a function of quarters. There should be nine plots, one for each asset.

Exercise 2. For each asset compute ω_{ID} for each quarter comparing it to the other three quarters of the year in which it lies. Plot ω_{cor} as a function of quarters. There should be nine plots, one for each asset.

Exercise 3. Based on your answers to the first two exercises, identify which of your nine assets are better described by an IID model in each year. Give your reasoning.