香港中文大學(深圳)
The Chinese University of Hong Kong, Shenzhen

FIN 3080 Investment Analysis and Portfolio Management

SPRING 2022 || CUHK(SZ)

Assignment

Instruction:

1. Due: **Monday, 10:00am, April 11th, 2022.** Late submission of assignments will not be accepted. You can write the report in English or Chinese.
2. Please submit your answer in one PDF (name your file with the format "ID+Name").
3. Submit the **code files** as an attachment.
4. A mark of zero (0) should be awarded for the assessment in which the plagiarism or fabrication was found to occur.

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Assignment 2 Study the time series and cross section of beta

1. Please estimate the beta of the stock Vanke (SHE: 000002). Starting from January 2010, please use the past 24 months Vanke's monthly returns, CSI 800 index (中证 800 指数) return, and the overnight Shibor rate (do not forget to divide 12) to estimate beta at the end of each month until the most recently. Plot the time series of the betas of Vanke. What do you see from it?

2. Please estimate the beta for each stock at the end of June 2021 for all A-share stocks (including main board, small and medium board, GEM) using the monthly returns during the past 24 months). Please plot the probability distribution of betas. Report the minimum, maximum, median, 10%, 25%, 75%, 90% quantile of the estimated betas.