Quantitative Portfolio Management

Assignment #2

Raman Uppal

EDHEC Business School

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Instructions for each assignment . . . I

- Each assignment should be done in a group of 4 or 5 students.
    - This means that groups of 1, 2, 3, 6, etc. are not allowed.
    - Diversity in groups is strongly encouraged
      (people from different countries, different genders, different finance
      knowledge, and different coding ability, etc.)

Instructions for each assignment . . . II

- ▶ Each assignment should be emailed as a Jupyter file

  - ▶ To Raman.Uppal@edhec.edu

  - ▶ The subject line of the email should be: "QPM: Assignment n," where $n = \{1, 2, \ldots, 8\}$.

  - ▶ Assignment n is due before Lecture n, where $n = \{1, 2, \ldots, 8\}$.

  - ▶ Assignments submitted late will not be accepted (grade $= 0$), so please do not email me assignments after the deadline.

Instructions for each assignment . . . III

- ▶ The Jupyter file should include the following (use Markdown):
    - ▶ Section "0" with information about your submission:
        - ▶ Line 1: QPM: Assignment n
        - ▶ Line 2: Group members: listed alphabetically by last name, where the last name is written in CAPITAL letters
        - ▶ Line 3: Any comments/challenges about the assignment
    - ▶ Section "k" where $k = \{1, 2, \ldots\}$.
        - ▶ First type Question k of Assignment n.
        - ▶ Then, below the question, provide your answer.
        - ▶ Your code should include any packages that need to be imported.

Questions for Assignment 2

▶ Please do the following.

Q2.1 Download daily stock prices for FAANG stocks (Facebook/Meta, Amazon, Apple, Netflix, Google/Alphabet) from January 2015 until December 2020. Note that the ticker symbols for the five stocks are: META, AMZN, AAPL, NFLX, and GOOG.

Q2.2 Compute the first and second moments of stock returns for each of these stocks (i.e., their means, variances, and covariances).

Q2.3 Compute the skewness and excess kurtosis for the returns for each of these stocks. Do the daily stock returns have a Normal distribution?

End of questions