Financial Econometrics Problem Set 1

Due Date: Wednesday 13th Sep, in Class

- 1. Textbook: A.7, B.2, B.5, C.1, C.6
- 2. R Questions: (give the R coutput and the commands used)
 - a. In R, generate a sample of size N=1,024 from the exponential distribution with rate parameter r=0.2. Call X the vector containing the sample values. 2. Plot the density of the distribution of X, and a histogram of X.
 - b. Repeat the question above for Normal Distribution, t-distribution and gamma distribution.
 - c. Write the built-in data set EuStockMarkets (which contains of the daily end prices of various stock price indices) to a Tab-separated text file with write.table . View it with a text editor (depending on your system). Change the NA value to . (period), and read the changed file back into R with a suitable command (you may use read.table or read.excel or any suitable command). Find the summary statistics (mean median, variance, standard deviation and correlations) of various indices in R. Plot each of the histograms.