Economics 430: Homework 1
Fall 2020, UCLA

Due Date: Oct 14, 2020

All problems require detailed worked out solutions to receive full credit. All problems are worth the same.

1. Evans & Rosenthal: 4.3.13

2. Evans & Rosenthal: 4.4.19

3. Evans & Rosenthal: 4.5.15

4. The file 'Prob4_data.txt' contains 50 observations from a Gamma distribution with unknown parameters α and β.

   (a) Plot a histogram of the data and overlay the respective density curve.

   (b) Compute the Method of Moments estimates of the parameters, $\widehat{\alpha}$ and $\widehat{\beta}$.

   (c) Generate 1000 new samples from your data and compute the Bootstrap Mean, standard errors, and 95% confidence intervals of the parameters and compare them against your results from part (b).

5. Evans & Rosenthal: 5.4.12

6. Evans & Rosenthal: 5.5.18

7. Evans & Rosenthal: 6.2.17

8. Evans & Rosenthal: 6.2.25

9. Evans & Rosenthal: 6.3.22

10. Evans & Rosenthal: 6.4.17