

AEB 6571 - Econometric Methods I

Assignment 5

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1. Generate a 100×10 sample of Uniform random variables in Excel.
 - a. Use the sample of Uniform Random variables to generate a sample of binomial random variables based on 10 draws with a probability of 0.5.
 - b. Using the same sample of random variables generate a sample of binomial random variables based on 10 draws with a probability of 0.75.
2. Compute the mean and variance of your first 75 draws. Are your empirical means and variances close to the theoretical mean and variance? Next use all 100 draws, are your empirical means and variances closer to the theoretical moments?
3. Draw a histogram of each sample and compare the histogram with that of the normal distribution function for each sample.
4. Compute the empirical cumulative distribution function for each empirical draw and compare it with the cumulative probability density function for the normal distribution function.