

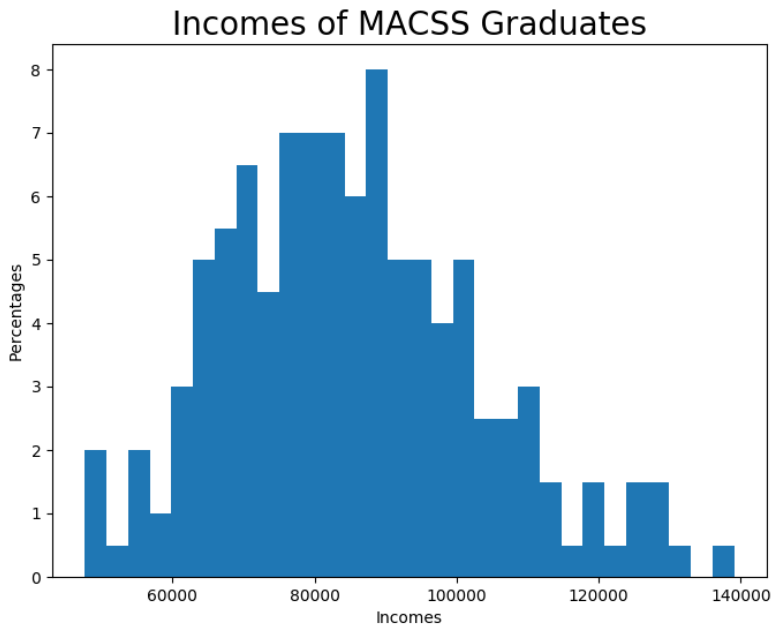
Problem Set #3

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Part a:



Part b:

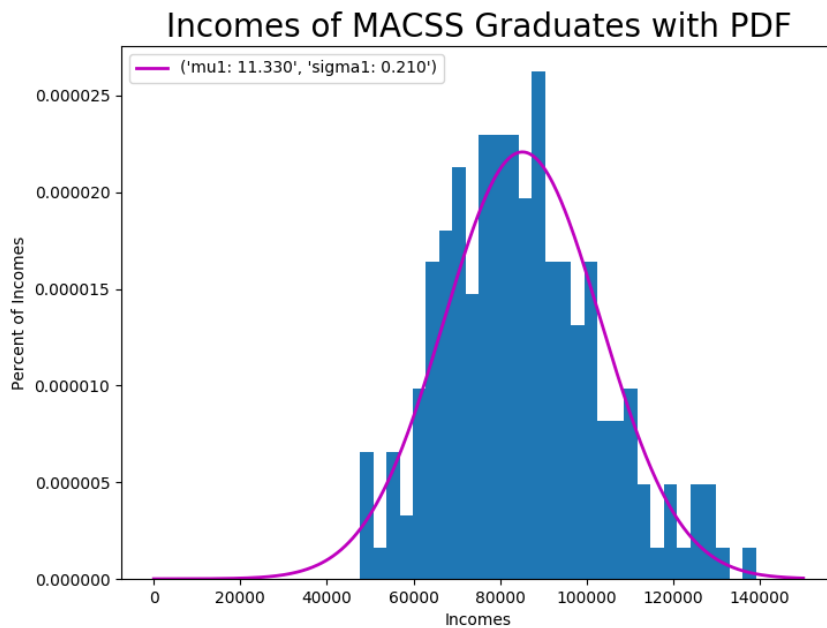
$$\begin{bmatrix} 1.94074838e-07 & 3.78322944e-08 \\ 3.37284530e-07 & 2.18887663e-07 \end{bmatrix}$$

Part c: The value of the SMM criterion function is $1.46728676343e-06$ at the estimated parameters $\mu = 11.33$ and $\text{sig} = 0.21$.

The data moments are: Mean of data = 85276.8236063, Standard deviation of data = 17992.542128

The model moments are: Mean of model = 85128.0023594, Standard deviation of model = 18070.4417461

The model mean is quite close to the data mean and the standard deviation is also just above the data standard deviation.



Part d: The value of the SMM criterion function is 591.876168699 at the estimated parameters $\mu = 11.3270485674$ and $\sigma = 0.209133199453$.

The data moments are: Mean of data = 85276.8236063, Standard deviation of data = 17992.542128

The model moments are: Mean of model = 84811.8936912, Standard deviation of model = 17919.7322022

The mean of this model is not as close to the mean data as the first model and neither is the standard deviation.

