

Most structural models require *nonlinear estimation*

- e.g. MLE, GMM or their simulated counterparts
- In nonlinear optimization, starting values are crucial
- Initializing at random starting values is likely to give poor results

It's important to start simple

- Try to calibrate values of all intercept parameters ( $\beta_0, \alpha_0, \gamma_0$ )
- See if you can get them to match avg. log wages, avg. schooling rate
- Then add more parameters and compare with more moments of the data
- This helps with starting values as well as verifying estimation performance

Other tips:

- Estimate a model that only has intercepts in each equation
- Verify estimates are identical across computing software products (e.g. Julia, R)
- Look at code from similar papers that have been published