

Stata: In-Class Exercise

Use the dataset `Earnings_and_Height` and answer the following questions.

1. What is the median value of height in the sample?
2. Estimate average earnings for workers whose height is at most 67 inches.
3. Estimate average earnings for workers whose height is greater than 67 inches.
4. On average, do workers taller than 67 inches earn more than shorter workers? How much more? What is a 95% confidence interval for the difference in average earnings?
5. Construct a scatterplot of annual earnings (*Earnings*) on height (*Height*).
6. Run a regression of *Earnings* on *Height*.
 - (a) What is the estimated slope?
 - (b) Use the estimated regression to predict earnings for a worker who is 67 inches tall, for a worker who is 70 inches tall, and for a worker who is 65 inches tall.
7. Repeat 6(a) for women.
8. Repeat 6(a) for men.
9. Suppose height were measured in centimeters instead of inches. Run a regression of *Earnings* on *Height* (in cm). (Hint: 1 inch=2.54 cm)
 - (a) What is the estimated slope of the regression?
 - (b) What is the estimated intercept?
 - (c) What is the R^2 ?

10. Suppose earnings were measured in thousand dollars. Run a regression of *Earnings* (in thousand dollars) on *Height*.
- (a) What is the estimated slope of the regression?
 - (b) What is the estimated intercept?
 - (c) What is the R^2 ?