

Homework Assignment #7 (due April 10, 2:00 p.m.)

Written problems:

1. Wooldridge: Chapter 7, Problem 2
2. Wooldridge: Chapter 7, Problem 8

Computer problems (show any relevant Stata output):

1. Wooldridge: Chapter 5, Computer Exercise C1
(To save the residuals after a regression, use the **predict** command with the **resid** option --- for example: **predict uhat, resid**)
2. Wooldridge: Chapter 5, Computer Exercise C2
3. Wooldridge: Chapter 6, Computer Exercise C8
4. Wooldridge: Chapter 7, Computer Exercise C2, parts (i) and (iv)

Also answer the following: Using the original model (the one in part (i)), assume that you replaced the **married** indicator variable with a **single** indicator variable (where **single** = **1 - married**). Without actually running the regression, what would the following quantities be in the new regression: (a) R-squared, (b) the slope estimate on **single**, and (c) the slope estimate on **educ**. Explain. (After you've figured it out, you can check yourself in Stata but you don't need to report the Stata output.)

5. Wooldridge: Chapter 7, Computer Exercise C3

Also answer the following: Suppose that you wanted to group the following three categories together (**scndbase**, **thrdbase**, **shrtstop**) into a single category. What are you implicitly assuming by grouping these categories together? How would you test this assumption?