

Homework #2  
Econ 120B, Econometrics  
UC San Diego

*Note: The first question is to get you started using Stata. It will be covered in the discussion section this week. I understand that you are also working on the first homework assignment, so I made this homework shorter on purpose.*

1. Can money buy a winning baseball team?

To answer this question, download the `baseballsalaries.dta` dataset from the class website (in the homework folder). This dataset has the payroll for 30 MLB teams and their regular season win/loss record. The dataset has 5 variables. The variable ***team*** contains the team name, ***playoffs*** is a variable which is 1 if the team made the playoffs and 0 otherwise, ***payroll*** is the amount the team spent on player salaries, and ***wins*** and ***losses*** count up how many games the team won and lost during the regular season.

a. What is the average payroll for these thirty teams? (*note: the payroll variable is in thousands of dollars*) Is there a lot of variation in payroll or minimal variation in payroll?

b. What is the average percentage of games won by a team?

c. Graph a scatterplot of the team's winning percentage versus payroll. (*hint: type **help graph twoway** in Stata*).

d. What is the difference in average payroll for teams which make the playoffs compared to teams which do not? Is this difference (i) large in a real world sense, (ii) statistically significant (test this formally), and (iii) likely to be causal?

2. Complete the class survey which is posted on the class webpage. You can find it on the “Home” page as well as the “Modules” page.