

This part of the problem set deals with analysis of data in Stata. See “Brief Introduction to Stata” on your moodle account on using Stata. The font for your submitted log file should be Courier 9 pt so that the columns line up.

For this exercise, you will need to use the dataset “qb1.dta” that is available in the same section of the course account as the problem set. This file has information on the 37 NFL quarterbacks who were on both the top 50 highest-paid list and the top 63 highest-performing list for 2013. You should save this file to a location on your computer. All of the commands you will need are described in the document “Brief Introduction to Stata,” also available on the moodle account

1. Open Stata, and set the directory to identify the folder where your data file can be found. Start a log file with the name “PS1.log”.
2. Open the dataset qb1.dta. Look at the data in the data editor. Which quarterback from that year’s Super Bowl (Super Bowl XLVIII) is not in the data? What was the other starting quarterback’s salary in 2013? Use the asterisks to enter this answer into your log file. (If a line begins with “\*”, Stata knows not to interpret the following text as a command. Your typing is simply entered into the log file as a comment.) Note: If you don’t know who the quarterbacks in Super Bowl XLVIII were, google it!
3. Use the describe command to figure out what the variables mean.
4. Use the summarize command to get averages, standard deviations, minima, and maxima for these variables.
5. Now summarize only the variables “yearpay” and “guarantee.”
6. What is the median of “yearpay”? Use the sum, d command. Use asterisks to enter your answer in the log file.
7. Use the tabulate command to get a frequency distribution for “freeyr”. Dr. Christoph Hauser  
Econometrics II 3
8. Create a new variable called “comppct” that is equal to the number of completions divided by the number of pass attempts. You will need to use the gen command. Summarize this variable.
9. Create a dummy variable called “pct50” equal to one if the quarterback completes more than 50% of his passes, 0 otherwise. Summarize this variable. Then drop it using the drop command.
10. How many players threw more than 25 touchdown passes in 2013? Use the count command, with the “if” qualifier.
11. Summarize salary for players who threw more than 25 touchdowns.

12. Regress “yearpay” on “passingyards” and “interceptions”. Interpret the coefficients, including the constant. Again, use asterisks to enter text into your log file.

Don’t forget to close your log file! Print it out and upload it in PDF format to your moodle account — remember to write your name(s) on top